

EVIDENCE ON THE GOVERNANCE ROLE AND INVESTMENT STRATEGY
PERFORMANCE OF BOUTIQUE INSTITUTIONAL INVESTORS

A Dissertation

by

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ABSTRACT

I identify an unexplored type of institutional investor (equity boutiques) that are characterized by their relatively small size but highly concentrated investment strategy. This concentrated strategy suggests that boutiques have the incentive to monitor management, but their limited assets under management cast doubt on whether they will be influential. In the context of discretionary investment decisions, I find evidence that boutiques oversee management by curbing myopia. Even though boutiques are small, they still appear to be influential. Empirical evidence suggests that this influence comes, in part, from their expertise, which is heeded by other institutional investors. I also examine whether boutique investors earn abnormal returns on their investments and provide insights into the potential sources of those returns. More specifically, consistent with the notion that boutiques have expertise and an information advantage, I find that boutiques earn abnormal returns and that these returns are earned in part by exploiting information incremental to publicly available information.

DEDICATION

To my parents, for everything that I am I owe to you. Thank you for everything. I am proud to be
your daughter and to follow in your footsteps.

To Armand, for your unwavering belief in me. I am extraordinarily grateful to have had you by
my side every step of the way.

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All work conducted for the dissertation was completed by the student.

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1. INTRODUCTION

Institutional investors are an important component of corporate governance oversight because they represent a substantial majority of the equity market. Thus, institutions can potentially exert significant influence on firms. The Organization for Economic Co-operation and Development ventures to say that, “the effectiveness and credibility of the entire corporate governance framework and company oversight depend to a large extent on institutional owners” (OECD, 2015). However, institutional investors are heterogeneous with respect to their incentives and ability to exercise managerial oversight. A recent survey of asset managers by the Investor Responsibility Research Center Institute revealed that engagement and oversight was either prioritized or ignored - a bimodal distribution (Goldstein, 2011). Prior research also supports the notion that only particular types of institutions – such as activists, blockholders, and Bushee’s (2001) dedicated institutions — play significant roles in corporate governance oversight (e.g., Gillan and Starks, 2000; Hartzell and Starks, 2003; An and Zhang, 2013; Ramalingegowda and Yu, 2012).

One previously unexplored type of institutional investor is the equity boutique. Boutiques are small institutions that specialize in asset management and implement a highly concentrated investment strategy. Boutiques’ influence on corporate governance is theoretically ambiguous. While their concentrated and specialized investment strategy suggests that boutiques have the incentive to monitor management, their small size calls into question whether they will be influential. In this study, I investigate two research questions. First, do boutiques monitor management? I find that boutiques contribute to managerial oversight in spite of their relatively small size. Second, do boutiques earn abnormal returns? I find evidence that boutiques do earn abnormal returns, which are driven in part by an information advantage.

The study of equity boutiques is important for several reasons. First, boutiques pursue a specialized investment strategy, and their focus on specific types of businesses, industries or geo-

graphic regions may increase their ability to monitor and influence management. Compared to non-boutiques that diversify their assets across an average of nearly 300 firms, boutiques focus their investments in only 33 firms, on average. As a result, boutiques may have an expertise that other institutions do not have. Second, boutiques' presence in the equity market is increasing. Since 2003, the number of boutiques grew over 170%, compared to growth in the number of institutions overall of 55%.¹ In addition to increasing in absolute number, the number of boutiques relative to the number of all institutional investors increased in relative amounts from 4.9% in 2003 to 8.5% in 2015. Third, 'dedicated' institutions as defined by Bushee (2001), which are generally associated with improvements in corporate governance (e.g., Ramalingegowda and Yu, 2012; An and Zhang, 2013), are on the decline in relative amounts.² Boutiques may fill the monitoring gap left by the decline in dedicated institutions.

Although boutiques' concentrated investment strategy suggests that they are incentivized to monitor management (Edmans and Manso, 2011; Fich et al., 2015), they are typically smaller than other institutional investors which may restrict their influence over management (Huddart, 1993; Shleifer and Vishny, 1986). Compared to non-boutiques that hold an average of \$5.4 billion in assets under management, boutiques hold an average of \$1.1 billion. These attributes lead to conflicting theoretical predictions with respect to whether and how boutiques engage with management. In particular, an institution's concentration drives its *incentive* to monitor management (Edmans, 2009). The actions and outcomes of a single investment is of greater consequence in a concentrated portfolio. Therefore, due to their concentrated investment strategy, boutiques should have strong incentive to monitor. On the other hand, an institutions' size drives its *ability* to monitor through institutional voice (Huddart, 1993; Shleifer and Vishny, 1986).³ According to this theory, boutiques are unlikely to be influential due to their small size. Thus, whether boutiques monitor management and exercise institutional voice is an empirical question.

¹From 2003 to 2015, the number of boutique institutions increased from 110 to 295.

²In 2003, 4.3% of institutions followed a dedicated strategy, compared to 2.8% in 2015.

³Black (1992) defines institutional voice as exercising influence (but not control) over management.

I test whether boutiques monitor management in the setting of discretionary investment decisions. Management can reduce discretionary investment in order to meet short-term expectations at the cost of long-term value. Bushee (1998) uses this setting to investigate whether institutional investors curb managerial myopia. Contrary to his prediction, Bushee does not find conclusive evidence that dedicated institutional investors curb managerial myopia.⁴ While boutiques' strategy differs from that of dedicated institutional investors, their monitoring incentives are similar. If boutiques use institutional voice to curb managerial myopia, then I expect an increase in boutique ownership to be associated with an increase in discretionary investment spending. Within a propensity score matched sample, I find evidence of higher levels of research and development, advertising expense, plant, property, and equipment, and aggregate investment in the year following net purchases by boutique institutional investors, even after controlling for dedicated institutional investor ownership.⁵ This evidence suggests that boutiques contribute to a reduction in managerial myopia.

The finding that boutique investment corresponds to reduced myopia is robust to several alternative designs. First, the finding is robust to both the use of a continuous and dichotomous measure of boutique purchases. Second, using a difference-in-difference design, years in which firms have positive boutique ownership have higher levels of discretionary investment than those firms without boutique ownership. Third, using a changes design, I find that the change in boutique ownership in year t is associated with an increased change in discretionary investment in year $t+1$. Lastly, a placebo test lends credibility to the design in that a change in boutique ownership in year t is not associated with discretionary investment in year $t-2$, as expected.

Even though boutiques are small, they still appear to be influential. It is not obvious why managers listen to boutiques' institutional voice in spite of their size. One possible source of influence

⁴Bushee (1998) concludes that "extreme proportions of ownership by dedicated institutions... have no incremental impact on the likelihood of R&D cuts," but he caveats that "the limited number of cases in which dedicated institutions own majority shares of firms" could reduce power.

⁵Consistent with the results of Bushee (1998), I find no significant association between dedicated ownership or dedicated net purchases and discretionary investment.

is boutiques' expertise. If boutiques are considered experts among other institutional investors, then management may be more apt to listen, because a sale by a boutique could have a ripple effect in the market. Consistent with this prediction, I find that an increase (decrease) in boutique ownership in quarter t is followed by an above (below) average change in non-boutique ownership in quarter $t+1$ even after controlling for determinants of institutional ownership. Overall, the evidence suggests that boutiques' expertise may generate broader influence.

The broader implication of boutique ownership is the potential impact on firm value. Boutiques' expertise positions them to earn abnormal returns through several possible channels, including improved corporate governance oversight and information advantages. First, while not all corporate governance improvements increase firm value (Bhagat and Bolton, 2008), boutiques are uniquely positioned to influence corporate governance in a more tailored, firm-specific approach. A tailored approach is more likely to enhance value than a 'one size fits all' approach (Coles et al., 2008). Thus, boutiques' influence on corporate governance is likely to be value-increasing.

An information advantage is a second channel through which boutiques' expertise could influence value. Sophisticated investors use information advantages to earn abnormal returns. For example, an information advantage could be based on public information that is not yet impounded into price (Piotroski and Roulstone, 2004) or on private information (Maffett, 2012). Boutiques' small and concentrated investment approach may provide them with an information advantage for two reasons. First, boutiques' expertise could lead to better use of accounting fundamentals thereby enabling boutiques to more accurately identify when fundamentals are not yet reflected into price. Alternatively, boutiques may use other information generated by their expertise. The limited number of investments could enable greater investment in expertise via the costly acquisition of private information. These information advantage sources are not mutually exclusive.

Therefore, I predict that boutiques have a beneficial impact on firm value. I test whether boutiques positively influence the value of their portfolio firms by examining whether portfolio firms earn abnormal returns. To control for the riskiness of the boutiques' portfolio, I use a five-factor

asset pricing model. This model controls for market returns and commonly known risk factors and generates a unique alpha (α) for each institutional investor (Fama and French, 2015). Alpha – the portion of portfolio returns that is not explained by one of the five factors – is a measure of success of the institutional investor. I find boutiques have positive and significant alphas, consistent with boutiques implementing a successful investment strategy. I also find that, while boutiques are no different in performance than activist investors or dedicated institutions, their alphas are significantly larger than transient and quasi-index institutions. This evidence is consistent with the conclusion that expertise and incentives play an important role in boutiques' investment strategy and, ultimately, value.

I next investigate whether boutiques are sophisticated users of financial information and have an information advantage incremental to the use of firm fundamentals. I use Piotroski's F-Score to capture a firm's fundamentals (Piotroski, 2000; Piotroski and So, 2012). If boutiques are sophisticated users of financial information, then I expect boutiques to trade on information in firm fundamentals (Choi and Sias, 2012). Indeed, I find that boutique-owned firms have higher F-Scores than non-boutique-owned firms. If boutiques have an information advantage incremental to firm fundamentals, then I expect boutique-owned firms to generate higher abnormal returns, holding constant the firms' fundamentals. To test this prediction, I compare one-year buy-and-hold abnormal returns (BHAR) of firms within the same F-Score Tier with and without boutique ownership. For the low and medium F-Score tiers, the mean BHAR is significantly higher for firms with boutique ownership than firms without. For firms with low to medium financial health, boutiques distinguish winners and losers holding financial health constant. Overall, the evidence is consistent with the prediction that boutiques have an information advantage.

The contribution of this paper is threefold. First, this is the first study, to my knowledge, that identifies boutique institutional investors as a distinct type of institution. The study of subsets of institutions is important because institutions vary with respect to investment strategy, incentives, and behavior. Classifications enable researchers to more precisely test predictions that apply only

to institutions of a certain type. Descriptively, boutiques are distinct from activist, dedicated, transient or quasi-index institutional investors in their size, concentration, number of investments held, age, and several other attributes. Boutiques also behave differently from other classifications in the multivariate analyses. Thus, future research may benefit from the inclusion of boutiques as a distinct classification.

Second, this study contributes to the corporate governance literature that investigates the role of institutional investors in managerial monitoring. Numerous studies analytically model and empirically investigate the heterogeneous incentives of institutional investors. The study of boutiques' corporate governance role is important because the theoretical predictions are conflicting. I find that boutiques' incentives outweigh any limitation due to their small size. Thus, boutiques appear to be a type of institution that improves corporate governance. This finding is especially relevant as the relative proportion of dedicated institutions – historically associated with improved corporate governance – is shrinking. Thus, for studies on the monitoring role of institutional investors, boutiques are a relevant subset of institutions to study.

Lastly, this study contributes to the literature on how institutional investors earn abnormal returns. In particular, several studies document empirical evidence that institutional investors leverage an information advantage to earn returns in excess of the market (e.g., Piotroski and Roulstone, 2004; Maffett, 2012). The evidence suggests that boutiques enjoy an information advantage, possibly as a result of their expertise. Thus, the examination of expertise as a source of private information is an opportunity for future research.

This paper is organized as follows. Section 2 defines boutique institutions and discusses the time-series trends that gave rise to the boutique institutional investor. My first research question —do boutiques monitor management —is discussed and empirically tested in Section 3. My second research question —do boutiques earn abnormal returns —is discussed and empirically tested in Section 4. Section 5 concludes.

2. BOUTIQUE INSTITUTIONAL INVESTORS

This section introduces the boutique institutional investor. I define boutiques using business press and industry research and discuss the relevance of boutiques in the context of the landscape of institutional investors. Then, I discuss the sample selection and classification process followed by descriptive statistics.

2.1 The Definition of Boutiques

While the word “boutique” is regularly used in the financial services industry to describe a small and specialized business, there are different types of boutique financial firms. The focus of this study is equity boutiques, also known as asset management boutiques. Two other commonly discussed types of boutiques are advisory boutiques and boutique investment banks. Advisory boutiques may focus on providing advice to clients on specialized topics such as mergers and acquisitions. Boutique investment banks may focus on raising capital or restructuring. In contrast, equity boutiques have an “exclusive commitment” to asset management (Coyle, 2009).¹ Equity boutiques are the focus of this study because they are the type of financial firm that are theoretically likely to promote good corporate governance.

While there does not yet exist a universal technical definition of boutiques, two defining attributes emerge from business press and industry research: size and specialization. Boutiques are regularly described as “small”. Limited assets under management is a necessary condition for a specialized investment strategy. In fact, boutique fund managers convey an intention of “staying relatively small”, even if it could mean turning down potential customers to prevent excessive growth (Comtios, 2015).

The second defining attribute of boutique institutions is specialization. Regularly described as “specialized”, their approach to investing is “highly” or “narrowly focused” (Jacobius, 2011). This

¹Appendix B summarizes quotes from a few of these sources that highlight the defining attributes of equity boutiques. All quoted words and phrases can be found in context in the appendix.

laser focus on a specialty can also be more technically described as the “concentration of their portfolios” in classes, industries, or geographic regions (Oakley, 2014). Indeed, this “niche” style of investing prompts Morningstar.com’s Investing Classroom to encourage diversification across boutiques in order to reduce risk. Boutiques are also often described as “flexible” or “nimble”, because they can make trades that large institutions cannot make (Comtios, 2015; McGrath, 2017; RidgeWorth Investments, 2014). This flexibility enables boutiques to respond quickly to a changing market by moving funds in and out of stocks without moving the price.

Boutiques are conceptually different from other types of institutions studied in the literature such as Bushee’s (2001) classifications of dedicated, transient, and quasi-index. Dedicated institutions are the largest of the three classifications and take large positions (often blockholder positions) in a large number investments. This strategy stands in stark contrast to boutique institutions that limit their number of investments to just a few firms and, because of their size, typically do not take blockholder positions. Transient institutions are characterized by frequent turnover of investments and earnings sensitivity. Boutiques, on the other hand, are not characterized by their rate of turnover. And perhaps opposite of boutiques’ highly concentrated investment strategy, quasi-Index institutions are highly diversified and infrequently turnover investments. Overall, it appears that boutiques are a unique type of institutional investor.

To empirically investigate boutiques, I create a technical definition to reflect the three attributes that emerge from the business press and industry research. The three criteria emphasized by business press and industry research are (1) an exclusive commitment to asset management, (2) size, and (3) specialization. I operationalize these criteria by focusing on institutional investors (1) whose only purpose is the investment of assets under management in common stock (excluding exchange-traded funds), (2) who invest less than \$100 billion in assets under management, and (3) whose portfolio concentration is in the top tercile.² This classification process is described in detail

²The restriction set at \$100 billion is based on anecdotal mentions of what constitutes a ‘large’ institutional investor. The results are robust to using a much tighter restriction, such as \$50 billion.

in Section 2.3.

2.2 The Relevance of Boutiques

The landscape of institutional investors and their investment strategies evolved significantly over the last two decades (Celik and Isaksson, 2013). Investment strategies, holding periods, the investment chain, and institution types have all seen change. This changing environment gave way for the rise of the boutique institutional investor. Average holding periods, a key component of investment strategies, declined globally over the past 20 years (Goldstein, 2011). A study conducted by the Committee for Economic Development reports that the average holding period across all institutional investors is now less than one year (Heineman and Davis, 2011). Another relevant change in investment strategies is the lengthening of the investment chain, giving rise to additional agency problems. Historically, the shareholder base was comprised of individuals and institutions that directly bridge individuals to investee firms. Now, fewer individuals invest directly and more institutional investors invest in one another or exchange traded funds. This results in a longer path, on average, between the investee firm and the shareholder. The lengthening of the investment chain diminishes the incentive to oversee the ultimate investee firms. The prevalence of passive investment is on the rise (Goldstein, 2011, p. 46-47), driven by the longer investment chain and the tendency to invest in an index. Boutique institutional investors, however, maintain a shorter investment chain on average than non-boutique institutions, because boutiques do not invest in the portfolios of other institutions. Therefore, while additional agency problems can arise for institutions with long investment chains (Ahrens et al., 2011), the path from agent to principal in the boutique setting is more direct.

Not only are investment strategies evolving, but the types of institutional investors are expanding. Assets under management by private equity increased more than seven-fold from the mid-1990s to the mid-2000s (Cumming, 2011). In the same window of time, assets under management by hedge funds increased three-fold (Stowell, 2010). As the largest institutional investors contin-

ued to get even larger, an opportunity for smaller and more agile institutional investors emerged (Morrison and Wilhelm, 2007): Boutiques fill this void. Boutiques are limited in size in order to develop expertise in a narrow area and be agile and responsive to a changing market.

The emergence of boutiques is apparent in the data. Figure 2.2 graphs the growth of institutional investors by type based on 2003 numbers.³ From 2003 to 2015 the number of boutique institutional investors grew 171%, which is over three times the growth rate in the entire population (54.7%).⁴ The three well-known classifications of institutional investors established by Bushee (1998, 2001) show growth patterns more similar to that in the total population: 41.8%, 56.8%, and 62.0% for Dedicated, Quasi-Index, and Transient institutions, respectively.⁵ In addition to growth in number, the relative proportion of boutiques in the population of institutions is growing over time. In 2003, boutiques only made up 4.9% of the population. In 2015, boutiques now make up 8.5% of the population.

Overall, detailed observation of institutional investors across a long time series reveals gradual yet dramatic changes. Such dramatic changes elicit re-examination of the types of institutional investors. Whether boutiques emerge as a unique type of institution is an empirical question.

2.3 Classification of Boutiques

The sample selection and classification process is summarized in Table 2.1. I begin with all 13F filings from Thomson-Reuters. In my sample period, 2003-2015, there are 156,243 unique manager-quarter observations for 5,726 distinct managers.⁶ I require at least 4 investments and at least 8 quarters of data, similar to Bushee (2001), resulting in 123,644 quarters for 4,828 managers.

Four restrictions are made on the data to identify those manager-quarters that exhibit the attributes of an equity boutique. First, I restrict giant institutions ($AUM > \$100$ billion). This

³This growth pattern is robust to choosing a different base year. 2003 is the first year in my sample period.

⁴In 2003, 2,127 distinct institutions filed 13Fs with the SEC. In 2015, this number was 3,291.

⁵The growth in the overall population is 55%, therefore dedicated institutions are growing at a rate slower than the population.

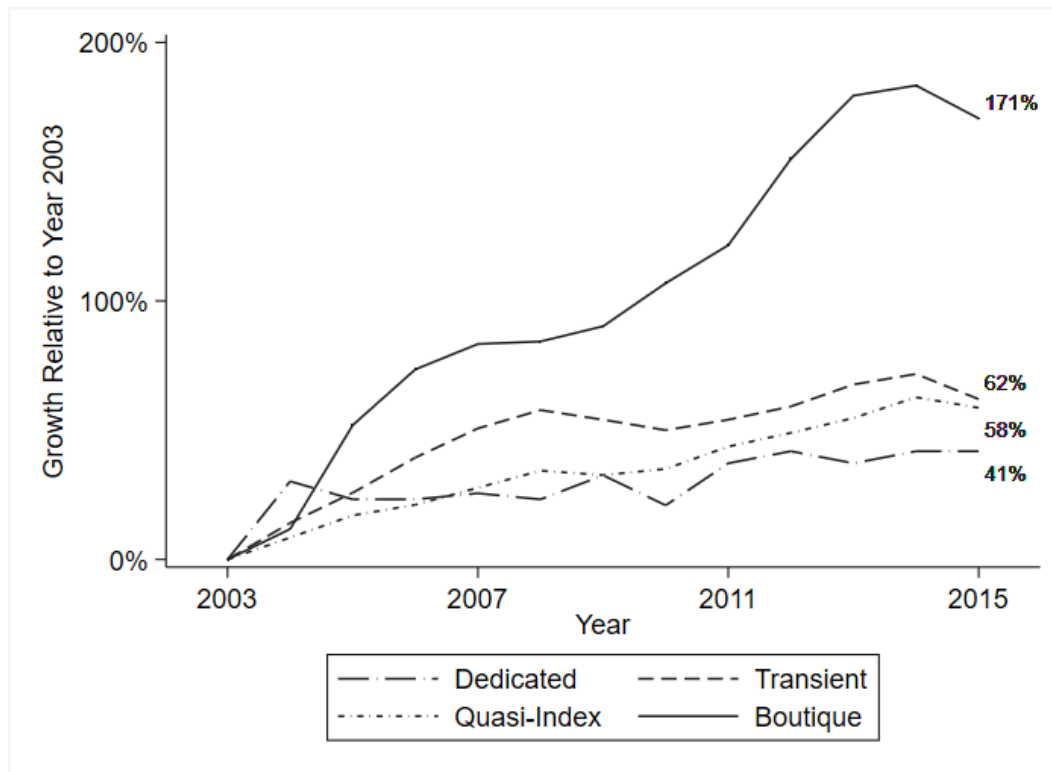
⁶For classification purposes, I use data beginning in 1999 in order to have 5 years of historical data. For analysis, the sample period 2003-2015 is used throughout the paper.

Table 2.1: Sample Selection

<i>Panel A: Sample Selection</i>		
	Observations	Mgrnos
Distinct Observations/Mgrnos from 2003-2015	156,243	5,726
Less: Institutions with less than 4 investments	(9,655)	(356)
Less: Institutions with less than 8 quarters of data	(22,944)	(542)
Classifiable observations	123,644	4,828
Less: AUM greater than \$100 Billion	(1,030)	(9)
Less: Greater than 5% AUM invested in ETFs	(41,739)	(612)
Retain Only: Institution Types “INV” or “IIA”	(17,087)	(825)
Retain Only: Top Tercile of Concentration	(42,426)	(1,410)
Observation meeting boutique criteria	21,542	1,987
Less: Rolling 5-year Average less than 75%	(6,190)	(925)
BoutiqueQ = 1	15,352	1,062
<i>Panel B: Classification of Boutique</i>		
	Observations	Mgrnos
BoutiqueQ = 1	15,352	1,062
Less: Missing Data	(60)	(11)
Less: Institutions that <i>oscillate</i> between Boutique and Non-Boutique	(2,801)	(185)
Less: Institutions that <i>leave</i> boutique classification	(3,076)	(286)
Less: Institutions that <i>join</i> boutique classification	(1,847)	(124)
Institutions that are <i>always</i> boutique: Boutique = 1	7,568	456

This table summarizes the classification process of boutique institutional investors.

Figure 2.1: Growth of Number of Institution by Type.



This graph presents the growth of institutional investors from 2003 to 2015 by institution type. Growth is scaled by 2003 levels. Bushee permanent classifications can be obtained from Brian Bushee's website. The classification of boutique is defined in detail in Section 2.3

restriction is not binding - none of the observations or managers eliminated at this stage meet all three other restrictions. This result is unsurprising, as the boutique investment strategy (specialized and concentrated investments) requires limited assets. Secondly, I retain only institutions that invest at least 95% of their assets in common stock, not exchange traded funds (ETFs).⁷ In order to capture the correct kind of financial businesses, I restrict the sample to institutions classified as an investment company ("INV") or independent investment advisor ("IIA"), as coded by Brian Bushee on his website.⁸ This step will eliminate financial business such as investment banks, insurance companies, or pension funds from the boutique classification.

⁷A list of all exchange traded funds is available online. Using these online sources, ETFs are manually coded as such based on the asset name and ticker.

⁸<http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html> is accessed in July of 2017.

Third, I capture highly specialized, niche investment strategies with a measure of internal concentration. Internal concentration is distinct from external concentration - a measure used by Bushee (2001) and others. Internal concentration is a measure of how concentrated an institution's holdings are *with respect to their portfolio of holdings*. External concentration is a measure of how concentrated an institution's holdings are *with respect to the common shares outstanding* of the firm in which they are investing. According to external concentration, an investment of 5% of common shares outstanding is more concentrated than an investment of 1% of common shares outstanding. According to internal concentration, an investment that is 5% of the institution's portfolio is more concentrated than an investment that is 1% of the portfolio, irrespective of the size of the investment with respect to common shares outstanding. Internal concentration is a measure of how important *each individual investment* is to the institution. Internal concentration is measured as $\Sigma[(price_i * shares_i)^2]/(AUM)^2$, where $price_i$ is the price per share of firm i , $shares_i$ is the number of shares the institution owns of firm i , and AUM is the institution's assets under management.⁹ I restrict the sample to the top tercile of concentration, resulting in 21,542 quarters (1,987 managers) that meet the boutique criteria.

Lastly, to ensure the boutique classification is a representation of the institution at that point in time (and not a temporary oscillation), I compute the percentage of quarters in the previous 5 years (20 quarters) that qualify as boutique.¹⁰ Quarterly observations are classified as *BoutiqueQ* if at least 75% of the previous quarters qualify as boutique. This results in 1,062 institutions that are classified as *BoutiqueQ* at some point in the sample period.

Parallel to Bushee's permanent classification of transient, quasi-index, and dedicated institutions, I create a permanent classification of boutique institutional investors. The classification *Boutique* is saved for those institutions that are *always* classified as *BoutiqueQ* in the sample

⁹External concentration is measured as $\ln(\Sigma[(shares_i/csho_i)^2])$ where $shares_i$ is the number of shares the institution owns of firm i and $csho_i$ is the common shares outstanding of firm i .

¹⁰All results in the paper are similar to the use of a 3 year rolling window instead of 5 year rolling window. For institutions that are only 3 or 4 years old, I compute the percentage of quarters in the life of the institution that qualify as boutique. All results in the paper are similar if I require all 5 years.

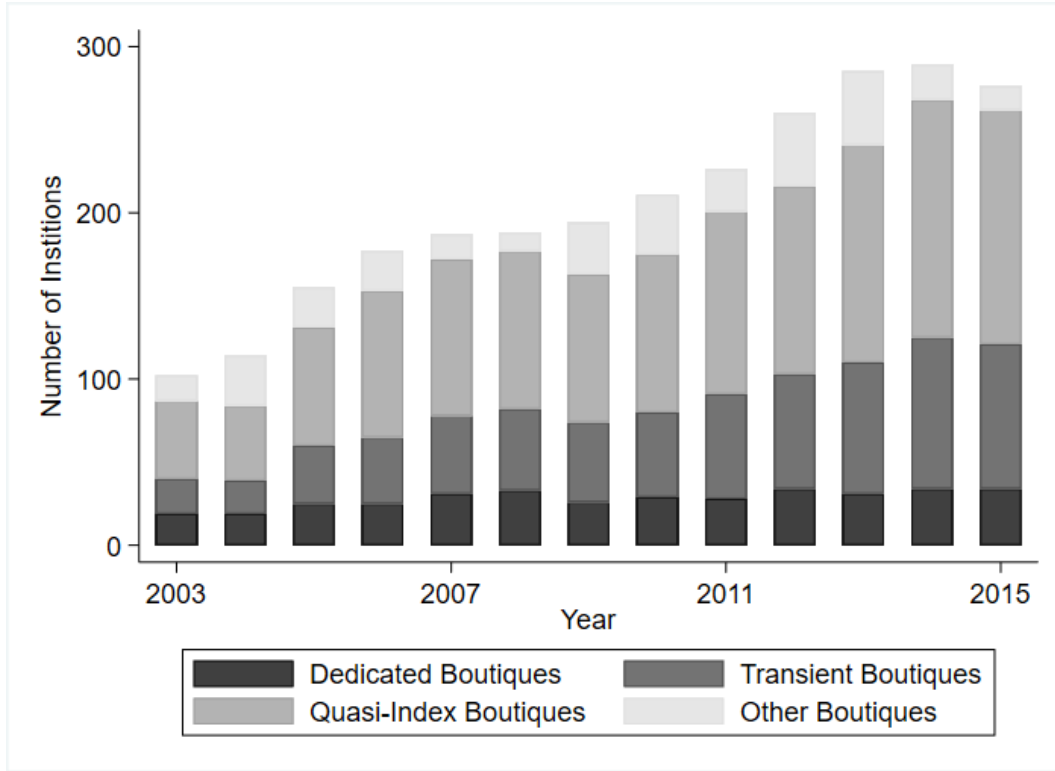
period. Under this classification, 456 boutiques are permanently classified as boutique. The permanent classification has several advantages over the quarterly refreshed classification of boutique. First, this classification eliminates the 185 institutions that oscillate between boutique and non-boutique more than one time. It is unlikely that a institution frequently shift its type, thus a permanent classification scheme reduces this noise. Secondly, it allows the computation of changes in holdings by boutique institutions. If an institution changes classifications between years, then a measure of change in holdings by boutique institutions is unreliable - the change could simply be a result of new classifications. therefore, throughout the paper, I rely on *Boutique* as my primary classification of boutique institutional investors.

2.4 The Uniqueness of Boutiques

A relevant concern when classifying institutions as boutiques is whether these boutique institutions fundamentally differ from the established classifications in the literature. In this section, I summarize how boutiques differ from other types of institutions using descriptive statistics. Figure 2.1 is a bar graph of the number of boutique institutions over time and by Bushee (2001) classification. In 2003, there are 102 boutique institutions, of which 19 are dedicated, 21 are transient, and 47 are quasi-index. The remaining 15 are unclassified. In 2015, there are 276 boutique institutions, of which 34 are dedicated, 87 are transient, 141 are quasi-index, and 14 are unclassified. The proportions of dedicated, quasi-index, and transient institutions that also qualify as boutique remain relatively constant over time. Additionally, of the 282 managers classified as an activist institutional investor, only 54 are also classified as boutique. This data conveys that boutique institutions are not a subset or superset of one of the other well-known institutional investor classifications.

To understand descriptive differences across groups, I tabulate a variety of institution and portfolio characteristics by classification in Table 2.2. I compare the boutique mean (median) to the means (medians) of the other classifications using a two-tailed, unpaired *t*-test (a nonparametric equality-of-medians test). It is not apparent, ex ante, whether boutiques will be significantly dif-

Figure 2.2: Boutique Institutions Over Time and by Type.



This graph presents the number of boutique institutional investors on December 31 of each year from 2003 to 2015. The boutiques in each year are then subdivided by Bushee classification: dedicated, transient, quasi-index, and other (unclassified). Bushee classifications can be obtained from Brian Bushee's website. The classification of boutique is defined in detail in Section 2.3.

ferent than other types of institutions on average, because boutiques overlap with all established categories of institutional investors. To make clean inferences, the dedicated, transient, quasi-index, and activist samples *exclude* any boutique institutions.¹¹ For more detail on the distribution of variables, Table 2.3 reports the distribution statistics (including first and third quartile) for boutique institution (Panel A) and all institutions (Panel B).

¹¹Inferences remain the same to the inclusion of boutique institutions in the remaining categories.

Table 2.2: Institutions' Characteristics

	Boutique			Dedicated			Transient			Quasi-Index			Activists		
	mean	median	stdev	mean	median	stdev	mean	median	stdev	mean	median	stdev	mean	median	stdev
Assets Under Management	1,142	301	(2,858)	10,123***	1,470***	(19,649)	2,802***	528***	(8,252)	4,138***	402***	(12,687)	5,843***	1,086***	(14,579)
Concentration	0.131	0.095	(0.099)	0.145***	0.109***	(0.131)	0.047***	0.027***	(0.063)	0.037***	0.023***	(0.053)	0.060***	0.035***	(0.075)
Number of Investees	33.5	21.0	(61.7)	171.4***	46.0***	(407.8)	260.0***	93.0***	(468.7)	300.1***	114.0***	(546.2)	270.2***	78.0***	(544.0)
Institutional Owner's Age	7.114	5.751	(4.909)	13.414***	14.008***	(6.485)	8.968***	7.507***	(5.703)	11.173***	10.759***	(6.189)	11.095***	10.504***	(6.351)
Stability of Holdings	0.493	0.503	(0.302)	0.624***	0.690***	(0.277)	0.292***	0.238***	(0.253)	0.719***	0.770***	(0.206)	0.450***	0.455***	(0.299)
Portfolio Turnover	0.116	0.101	(0.070)	0.103***	0.091***	(0.061)	0.159***	0.146***	(0.080)	0.089***	0.078***	(0.050)	0.135***	0.119***	(0.074)
Average Holding Period (Yrs)	2.161	1.802	(1.429)	2.862***	2.514***	(1.540)	1.337***	1.098***	(0.883)	3.573***	3.252***	(1.744)	2.111*	1.703***	(1.500)
Avg. Holding Period / IO Age	0.383	0.342	(0.226)	0.267***	0.209***	(0.184)	0.202***	0.155***	(0.156)	0.401***	0.364***	(0.209)	0.239***	0.198***	(0.173)
Average Pct Holdings	0.030	0.012	(0.041)	0.086***	0.079***	(0.052)	0.009***	0.004***	(0.014)	0.007***	0.001***	(0.014)	0.028***	0.018***	(0.031)
Pct Held in Large Blocks	0.183	0.000	(0.269)	0.502***	0.554***	(0.278)	0.037***	0.000***	(0.092)	0.034***	0.000***	(0.095)	0.170**	0.091***	(0.205)
AUM / Number of Investees	39.63	13.88	(61.93)	87.66***	34.00***	(97.65)	14.36***	5.37***	(29.58)	14.26***	3.53***	(33.75)	37.24*	11.01***	(62.79)
Herfindahl Concentration	-5.680	-5.327	(3.101)	-1.772***	-1.477***	(2.062)	-6.143***	-5.676***	(3.161)	-7.112***	-7.072***	(3.512)	-3.630***	-3.162***	(2.538)
FF48 Industry Concentration	0.273	0.216	(0.174)	0.300***	0.228*	(0.219)	0.180***	0.124***	(0.151)	0.141***	0.093***	(0.136)	0.208***	0.150***	(0.161)
Portfolio BHAR	0.005	0.004	(0.059)	0.003*	0.003	(0.058)	0.003***	0.003	(0.041)	0.001***	-0.000***	(0.029)	0.004	0.003	(0.045)
Portfolio Avg Assets	6.713	6.708	(2.219)	6.420***	6.470**	(2.313)	6.777*	6.931***	(1.948)	7.910***	8.180***	(1.863)	6.528***	6.674	(1.922)
Portfolio Avg MTB	3.322	2.469	(4.313)	2.706***	1.932***	(3.917)	3.318	2.634***	(3.874)	3.625***	3.004***	(3.598)	2.933***	2.270***	(3.836)
Portfolio Avg Growth	0.082	0.071	(0.094)	0.078	0.066**	(0.092)	0.088***	0.087***	(0.077)	0.065***	0.071	(0.061)	0.075***	0.072	(0.077)
Portfolio Avg Firm Age	19.332	17.154	(11.365)	18.779*	16.280*	(12.404)	21.211***	20.305***	(9.038)	31.098***	31.632***	(10.573)	20.205***	19.321***	(8.674)
Institution-Quarter Observations	7,568			2,590			36,634			73,317			7,194		

This table reports the means (medians) and standard deviations of all types of institutional owners: boutiques, dedicated, transient, quasi-index, and activist. All variables are defined in Appendix A. Dedicated, transient, and quasi-index classifications are made available by Brian Bushee. Activists are those institutions that have initiated a shareholder proposal. The classification of boutique is defined in detail in Section 2.3. The stars on the mean values for dedicated, transient, quasi-index, and activist correspond to the p-value of an unpaired two-sample t-test between boutiques and the respective type. The stars on the median values for dedicated, transient, quasi-index, and activist correspond to the p-value of a non-parametric equality-of-medians test between boutiques and the respective type. The sample period is 2003 to 2015. Continuous variables are winsorized at 1 and 99. The symbols *, **, and *** correspond to a p-value less than 0.1, 0.05, and 0.01, respectively.

4,828 institutional investors in my sample period from 2003 to 2015 are classifiable, and 456 of these are permanent boutiques (see Table 2.1).¹² Of the remaining non-boutique institutions, 85, 1,580, 2,414, and 228 are permanently classified as dedicated, transient, quasi-index, and activist, respectively.¹³

Boutiques' defining attributes stand out as different from the remaining classifications. Boutiques are smaller than all other types. While mean assets under management is \$1.14 billion, the median is only \$301 million: most boutiques manage less than a billion in assets. This value is considerably smaller than all other types, especially dedicated institutions which manage a mean of \$10 billion (median of \$1.5 billion), on average. Boutiques are also generally more internally concentrated. Compared to transient, quasi-index, and activist institutions, boutiques are significantly more concentrated. While dedicated institutions are more internally concentrated, on average, this difference is driven by investment banks (which are, by definition, not equity boutiques.) When comparing boutiques only to dedicated independent investment advisors or investment companies, boutiques are more concentrated. The concentrated investment strategy adopted by boutique institutions results in fewer investments. Boutiques, invest in only 33 (21) companies on average (median), while dedicated invest in 175 (46) and activists invest in 280 (78) , on average (median).

Consistent with the notion that boutiques have grown in prominence over the last two decades, the average age of boutique institutions is significantly lower than that of dedicated, transient, and quasi-index institutions. Boutiques have a mean (median) age only 7.1 (5.8) years, in contrast to all other classifications that have a mean (median) age of 10.2 (9.3) years old.

Since boutique institutions invest only in a few chosen firms, my *ex ante* expectation is that boutiques have lower turnover and longer holding periods than institutions on average. Along these dimensions, boutiques stand out as being different from transient. Boutiques have more stable holding periods (especially after adjusting for age) and have less turnover than transient

¹²Only 4,494 of these institutional investors are classified by Brian Bushee.

¹³As defined by Brian Bushee on his website, these classifications are permanent and do not change over time.

Table 2.3: Boutique Institution Descriptive Statistics

<i>Panel A: Boutique Institutional Investors</i>						
	N	Mean	σ	1st Quartile	Median	3rd Quartile
Assets Under Management	7,568	1,142	2,858	135	301	821
Concentration	7,568	0.13	0.10	0.06	0.09	0.16
Number of Investees	7,568	33	62	13	21	33
Institutional Owner's Age	7,568	7.11	4.91	3.25	5.75	9.50
Stability of Holdings	7,568	0.49	0.30	0.23	0.50	0.75
Portfolio Turnover	7,144	0.12	0.07	0.07	0.10	0.15
Average Holding Period (Yrs)	7,568	2.16	1.43	1.16	1.80	2.77
Avg. Holding Period / IO Age	7,568	0.38	0.23	0.20	0.34	0.53
Average Pct Holdings	7,568	0.03	0.04	0.00	0.01	0.04
Pct Held in Large Blocks	7,568	0.18	0.27	0.00	0.00	0.32
AUM / Number of Investees	7,568	39.63	61.93	5.62	13.88	41.84
Herfindahl Concentration	7,568	-5.68	3.10	-7.56	-5.33	-3.37
FF48 Industry Concentration	7,568	0.27	0.17	0.15	0.22	0.34
Portfolio BHAR	7,568	0.01	0.06	-0.03	0.00	0.04
Portfolio Avg Assets	7,568	6.71	2.22	5.20	6.71	8.38
Portfolio Avg MTB	7,568	3.32	4.31	1.38	2.47	4.05
Portfolio Avg Growth	7,566	0.08	0.09	0.02	0.07	0.13
Portfolio Avg Firm Age	7,568	19.33	11.37	10.60	17.15	25.58
<i>Panel B: All Institutional Investors</i>						
Assets Under Management	123,824	3,623	11,351	163	419	1,685
Concentration	123,824	0.05	0.07	0.01	0.03	0.05
Number of Investees	123,824	267	506	48	98	224
Institutional Owner's Age	123,824	10.23	6.13	4.76	9.25	14.76
Stability of Holdings	123,824	0.57	0.30	0.33	0.65	0.83
Portfolio Turnover	118,854	0.11	0.07	0.06	0.09	0.14
Average Holding Period (Yrs)	123,824	2.77	1.82	1.35	2.36	3.81
Avg. Holding Period / IO Age	123,824	0.34	0.22	0.17	0.29	0.47
Average Pct Holdings	123,824	0.01	0.02	0.00	0.00	0.01
Pct Held in Large Blocks	123,824	0.05	0.14	0.00	0.00	0.02
AUM / Number of Investees	123,824	17.20	39.19	1.90	4.35	13.10
Herfindahl Concentration	123,824	-6.67	3.49	-9.16	-6.42	-4.03
FF48 Industry Concentration	123,824	0.17	0.15	0.08	0.11	0.19
Portfolio BHAR	123,824	0.00	0.04	-0.01	0.00	0.02
Portfolio Avg Assets	123,824	7.45	2.01	6.25	7.74	8.90
Portfolio Avg MTB	123,824	3.49	3.74	1.92	2.87	3.90
Portfolio Avg Growth	123,822	0.07	0.07	0.03	0.07	0.11
Portfolio Avg Firm Age	123,824	27.03	11.44	18.11	26.89	35.37

Panel A (Panel B) reports descriptive statistics of boutique (all) institutional investors. All variables are defined in Appendix A. Dedicated, transient, and quasi-index classifications are made available by Brian Bushee. Activists are those institutions that have initiated a shareholder proposal. The classification of boutique is defined in detail in Section 2.3. The sample period is 2003 to 2015. Continuous variables are winsorized at 1 and 99.

institutions.

Unlike dedicated institutions, boutiques do not take large positions in their investments. Dedicated institutions hold, on average, 8.6% (median 7.9%) of the common stock of their investments. Consequently, 50% (median 55%) of dedicated holdings are held in blockholder positions (greater than 5% of common shares outstanding owned). This is in sharp contrast to boutique institutions that hold, on average, 3.0% (median 1.2%) of the common stock of their investments and only 18% (median 0%) of their positions are blockholder positions. Unsurprisingly, boutiques are much less externally concentrated than dedicated institutions.

An insight into boutiques' investment strategy emerges from its FF48 industry concentration. I calculate the Herfindahl concentration index for each institutional investor with respect to the amount of assets invested in each Fama French 48 industry classification. I find that boutique institutional investors' investments are highly concentrated with respect to industry, more so than transient, quasi-index or activist investors. Descriptively, it appears that boutique institutions are pursuing an industry expertise strategy. Given the industry concentration of boutique institutions, it is relevant to ask whether boutiques could be characterized by specializing in particular industries such as technology. To investigate whether this is the case, I identify the industry for each institution in which the largest percentage of their assets are held. Then, I observe the distribution of industries. While institutions tend to cluster around particular industries, boutiques and non-boutiques cluster with the same patterns. Thus, I do not believe boutiques can be said to cluster in a particular industry any more than another type of institutional investor.

Boutique institutions also exhibit different survivorship rates than other institutional investors. Table 2.4 reports the attrition of boutiques and other institutions. In the total population, the attrition rate spans 4% to 7%. In the sample of boutiques only, attrition is higher — between 5% and 15% each year. Boutiques' lower rates of survival could be a consequence of their high-risk strategy (concentrating investments in a small number of firms and industries). This observation is particularly relevant when assessing the portfolio performance of boutique institutions. If bou-

Table 2.4: Survivorship

Year	All Institutions			Boutique Institutions		
	Beginning Count	Departed	Attrition Rate	Beginning Count	Departed	Attrition Rate
2003	1,733	108	0.062	85	11	0.129
2004	1,687	71	0.042	79	13	0.165
2005	1,835	81	0.044	75	4	0.053
2006	1,956	91	0.047	85	8	0.094
2007	2,111	89	0.042	112	7	0.063
2008	2,287	120	0.052	138	10	0.072
2009	2,415	172	0.071	156	23	0.147
2010	2,499	155	0.062	151	20	0.132
2011	2,506	130	0.052	150	11	0.073
2012	2,580	125	0.048	172	14	0.081
2013	2,709	135	0.050	191	23	0.120
2014	2,811	137	0.049	190	10	0.053
2015	2,956	178	0.060	231	19	0.082

This table reports the attrition rates for all institutional investors and boutique institutional investors for the sample period of 2003 to 2015. The classification of boutique is defined in detail in Section 2.3. The beginning count is the number of distinct institutional investors (boutiques) are in the sample at the beginning of the year. Departed is the number of distinct institutional investors (boutiques) that were in the sample at the beginning of the year but are not in the sample at the end of the year. The attrition rate is the departed count divided by the beginning count.

tiques had a lower attrition rate, then there could be concerns that my market return analyses is upwardly biased. In fact, I find the opposite. Boutiques have a higher attrition rate than other institution types, which provides some assurance that my results will not be upwardly biased.

3. BOUTIQUES AND MANAGERIAL MYOPIA

3.1 Hypothesis Development

Monitoring by institutional investors is one component of the corporate governance framework. Institutions provide a potential monitoring benefit that individual equity holders cannot provide because of their size and economies of scale (Coffee, 1991; Black, 1992). Additionally, institutions are themselves agents, and monitoring management is part of their fiduciary obligation to the individuals that provide assets for investment. In an era where regulation of institutional investors was in question, early research examined whether institutional monitoring is beneficial. Black and Coffee (1994) study less-regulated Britain and conclude that deregulating institutional investors and allowing them to engage in corporate governance is, on average, beneficial.

The literature thus evolved to study subgroups of institutional investors to further understand which institutions provide monitoring benefits. Bushee (2001) classified institutions into three categories—dedicated, transient, and quasi-index—based on their attributes and investment characteristics. These classifications are regularly used in the accounting literature to further examine the different roles institutions play in the equity market and to test predictions that apply only to institutions of a certain type. Due to their large holdings and less transient positions, dedicated institutions are expected to monitor and engage management to improve portfolio returns instead of sell. Consistent with this expectation, An and Zhang (2013) find that dedicated institutions decrease crash risk because management is less able to accumulate bad news without market disclosure, and Ramalingegowda and Yu (2012) find that ownership by dedicated institutions is associated with accounting conservatism. The diversification strategy of quasi-indexers, however, impedes close monitoring of management and increases dependence on firm disclosures (Bushee and Noe, 2000). Transient institutions hold short-term investments in many assets and are sensitive to earnings news. Consequently, Bushee (1998) finds that transient institutions place short-term

pressures on management.

The notion that only certain types of institutions are engaged in corporate governance oversight is validated by a recent survey of asset managers conducted by the Investor Responsibility Research Center Institute that revealed that intervention with investee firms is either a priority or ignored — a bimodal distribution (Goldstein, 2011). This finding resonates with theories that predict that institutions choose either an intervention strategy or rely on threat of exit based on their attributes (Edmans, 2009; Edmans and Manso, 2011).

An active strategy engages management to influence change. Also known as institutional ‘voice’, intervention is not micro-management, but instead engaging on issues that trickle down into firm performance, such as executive compensation or policy changes (Black, 1992). For example, the academic literature finds evidence of institutional oversight of executive compensation structures, investment, and mergers and acquisitions (Hartzell and Starks, 2003; Bushee, 1998; Chen et al., 2007). In practice, the responsibility of corporate governance oversight bestowed upon all shareholders is shouldered by institutional owners who engage management. For example, “Say on Pay” (Section 951 of Dodd-Frank) requires shareholders to approve executive pay once every three years. In addition, firms are voting on proxy access at an exponential rate. Proxy access would provide large shareholders the opportunity to nominate an individual of their choosing to the board of directors.

On the other hand, not all institutions are able or incentivized to govern through intervention and instead rely on a more implicit signal. Colloquially coined as the “Wall Street Rule”, institutions implicitly share their feedback with management by buying or selling shares. Trading is a low cost alternative to intervention when the institution is unhappy with management behavior. Theory suggests that trading or the mere *threat* of exit can curb managerial opportunism (Edmans, 2009). However, Parrino et al. (2003) find weak evidence of institutions “voting with their feet” and conclude the evidence is more consistent with institutions selling shares following poor performance.

An institutional investor chooses a governance strategy based on its effectiveness and its net benefit. An institution's motivation to govern through intervention or an institution's inclination to trade is a function of the attributes of that institution. An institution's size and concentration are particularly predictive of the governance strategy it will choose.

The concentration of an institutional investor's portfolio drives the institution's *incentive* to monitor through 'voice'. Institutional investors with diversified strategies have limited incentives to monitor if they believe other firms are doing the job for them: a free rider problem. Therefore, institutional investors with diversified strategies will favor trading, while institutions with concentrated strategies will favor intervention (Edmans and Manso, 2011). In addition, the concentration of an institutional investor's portfolio should promote the development of *expertise*.

The size of an institutional investor's portfolio—the size of their position and assets under management—drives the institutions *ability* to monitor through 'voice'. Large institutional investors will favor an intervention strategy while small institutional investors will take a passive role (Huddart, 1993; Shleifer and Vishny, 1986). Dedicated institutions are the largest with respect to assets under management and most frequently hold blockholder positions, consistent with their tendency to engage management as opposed to 'voting with their feet'.

Whether boutique institutional investors monitor management is an empirical question. Due to their unique characteristics of being small in size but concentrated in investment strategy, the governance strategy boutiques will engage in is ambiguous. Boutiques' incentives and ability appear to be at odds. Boutiques have strong incentives to monitor their investee firms via intervention because they invest in a limited number of firms and maintain concentrated portfolios. The interquartile range of number of investments held by boutiques is only 13 to 33 firms, and these investments are often concentrated within industry. Thus, boutiques are poised to have expertise that improves their monitoring skill. Unlike large institutions that resort to boilerplate recommendations, boutiques can tailor their recommendations to the few firms in which they invest. On the other hand, due to their small size, it is not clear whether a boutique institutional investor's voice

will be heard, especially if their ownership stake is small. Trading is a feasible course of action for boutiques, but the sale of a particular investment could dramatically change a boutiques' portfolio.

I test whether boutique institutional investors engage in an active governance strategy in the context of discretionary investment expenditures. This setting was used by Bushee (1998) to test whether institutional investors curb or encourage myopic investment behavior. While Bushee documents that high transient ownership increases myopia, he finds no evidence that dedicated institutions curb myopia in this context. This no-result finding is counterintuitive because the theory unambiguously predicts that dedicated institutions are superior monitors. Thus, I revisit this puzzling finding while looking at both dedicated and boutique institutions. Theory suggests that boutiques are incentivized to monitor and engage management. Boutiques and dedicated institutions, however, vary greatly in both investment strategy and institution characteristics. Dedicated institutions are often blockholders and take larger positions in their investee firms. Boutique institutions, however, take smaller positions, on average. In addition, dedicated institutions invest in many more firms than boutique institutions (mean of 171 versus 33). Boutiques' limited investments may enable them to generate expertise for monitoring. These differences, therefore, may enable boutiques to curb managerial myopia in a way that dedicated institutions were unable.

The boutiques' concentrated investment strategy coupled with their ability to monitor predicts an active role in curbing managerial myopia. If boutiques take an active role, I expect boutiques to be associated with a reduction in managerial myopia (an increase in firm investment). On the other hand, the small size of boutiques predicts a more passive role. If boutiques take this passive role, I expect no association. Therefore, due to their unique composition of attributes, whether boutiques curb managerial myopia is an empirical question. I state my hypothesis in the alternative:

Hypothesis 1. *Boutique institutional investors curb managerial myopia.*

3.2 Research Design

Managerial myopia occurs when managers succumb to short-term pressures at the expense of long-term value. I capture the short-term orientation of management by looking at discretionary investment expenditures. I consider three discretionary expenses and two holistic measures of investment — research and development, advertising expense, and capital expenditure, the sum these three discretionary expense accounts and gross fixed assets. These three discretionary expenditure accounts share two important attributes. First, management can reduce spending in these areas in order to meet short term earnings expectations. Both R&D and advertising are expensed immediately under U.S. GAAP. Capital expenditure is not expensed, but does increase depreciation and interest expense (if purchased in part with debt); therefore, capital expenditure does have a flow-through effect on earnings. Second, these three accounts directly impact the firm's ability to generate long-term value. A reduction in research and development today will flow through to a reduction in value-adding innovation in the future (Bhojraj et al., 2009). Similarly, a reduction in advertising expenditure today will flow through to fewer sales in future periods. Lastly, management potentially loses out on long-term investment opportunities by constraining capital expenditure.

To test Hypothesis 1, I use the two following Tobit models at the firm-year level:

$$y_{i,t} = \beta_1 \text{BoutiqueFirm}_{i,t-1} + \beta_2 \text{BoutiqueBuy}_{i,t-1} + \beta_3 \text{DedicatedFirm}_{i,t-1} + \beta_4 \text{DedicatedBuy}_{i,t-1} + \beta_5 y_{i,t-1} + X'_{i,t-1} \Lambda + \gamma_{ff48} + \alpha_t + \epsilon_{i,t} \quad (3.1)$$

$$y_{i,t} = \beta_1 \text{BoutiqueOwnership}_{i,t-1} + \beta_2 \Delta \text{BoutiqueOwnership}_{i,t-1} + \beta_3 \text{DedicatedOwnership}_{i,t-1} + \beta_4 \Delta \text{DedicatedOwnership}_{i,t-1} + \beta_5 y_{i,t-1} + X'_{i,t-1} \Lambda + \gamma_{ff48} + \alpha_t + \epsilon_{i,t} \quad (3.2)$$

The measures of investment, $y_{i,t}$, include research and development (R&D), the sum of R&D and advertising expenditure (RDAE), capital expenditure (capex), all three combined (aggregate), and plant, property, and equipment (PPE). Each of these measures are scaled by total assets in

year t . I use a Tobit model in each analysis due to the censoring of the data at zero.¹ In Equation 3.1, $BoutiqueBuy_{i,t-1}$ is a dichotomous variable equal to one if boutique institutions were net purchasers of firm i 's stock in year $t-1$, and zero otherwise. If boutique institutional investors are effectively monitoring management, then as boutique ownership in the firm increases, I predict management will forfeit the short-term benefits in exchange for the long-run gains ($\beta_2 > 0$).²

An important design feature in my analyses is the inclusion of a dichotomous variable for net purchases by dedicated institutions (excluding boutiques) that parallels *BoutiqueBuy*. The role of dedicated institutional investors in managerial oversight is well accepted by the literature. Therefore, it is imperative that any findings on boutique institutional ownership is incremental to any effect of dedicated institutions.

As an alternate design, I replace the dichotomous measures of boutique and dedicated ownership and purchases with continuous measures in Equation 3.2. Specifically, *Boutique (Dedicated) Ownership* is the percent of common stock outstanding owned by Boutique (Dedicated) institutions, and Δ *Boutique (Dedicated) Ownership* is the change in ownership by Boutique (Dedicated) institutions. Continuous variables have the advantage of variation. As Δ *Boutique Ownership* gets larger, boutiques' incremental influence on management should be greater. However, a disadvantage of continuous variables is that they are not normally distributed. Both *Boutique Ownership* and Δ *Boutique Ownership* have a high proportion of zeros due to the number of firms that do not have any boutique ownership. Thus, I maintain the dichotomous specification as my main analysis.

I include in both analyses a vector of control variables, $X_{i,t-1}$, that are known predictors of investment (McNichols and Stubben, 2008; Edmans et al., 2017; Biddle et al., 2009). I include variables that capture a firm's investment opportunities, investment ability, and historical invest-

¹*RD* and *RDAE* have a large number of zeros and while *capex* and *ppe* are less frequently reported at zero, these distributions are highly left skewed and have a discontinuously large number of zeros. as a result of censoring, this the Tobit model is appropriate.

²The coefficient of interest is β_2 instead of β_1 , because a positive association between boutique ownership and discretionary investment may just inform us on the types of firms boutique invest in. However, if net purchases by boutiques in year $t-1$ is followed by an increase in discretionary investment in year t , then it lends credence to the conclusion that boutique ownership changes managements' behavior.

ment patterns.³ Specifically, a firm's size ($\ln(\text{assets})$), value (Tobin's Q), age ($\ln(\text{age}+1)$) and equity risk (standard deviation of daily excess returns over the fiscal year) all influence a firm's investment strategy. To capture financing ability, I rely on book value of cash, leverage, cash flow from operations, retained earnings (each scaled by total assets) and return on assets. To control for historical investment patterns I include lagged investment, asset growth, the standard deviation of ROA, the standard deviation of capital expenditure, and market to book. Lastly, I control for both prior year's returns and the percentage of common stock owned by institutional investors.

An econometric concern is that boutiques *choose* to invest in firms that fundamentally differ from firms that boutiques choose *not* to invest in. Indeed, as seen in Panel A of Table 3.1, firm-years in which boutiques are and are not net purchasers differ across multiple observable attributes. These differences in observables suggest that the relation between *BoutiqueBuy* and investment may be misspecified due to differences in likelihoods a given observation will be invested in by a boutique institutional investor. This misspecified functional form could induce bias in the model. Therefore, I create a propensity score matched sample in order to limit the sample to observations with common support (Shipman et al., 2016). A propensity score matched (PSM) sample allows me to restrict the control group to those observations that provide a reasonable counterfactual to the treatment group. Institutional investors will select firms to invest in using observable firm characteristics from the financial statements and stock market. The prediction model, therefore, contains the lagged values of institutional ownership, cash, retained earnings, return on assets, cash flow from operations, Tobin's Q, firm size, firm age, risk, returns, and market to book. Institutional investors will also select firms based on their current levels of investment. Therefore, I include all measures of investment in year $t-1$ in the prediction model. Lastly, observations are matched within year and Fama French 48 industry with a caliper of 0.01.

The covariate balance between treatment and control groups after matching is presented in Panel B of Table 3.1. The covariate balance after matching is improved, but four of the matching

³All variables are defined in Appendix A.

variables remain significantly different across treatment and control. Therefore, it is crucial to control for all matching variables throughout the analyses.

3.3 Results

An increase in investment followed by a purchase by boutique institutions would be consistent with Hypothesis 1, that boutiques curb managerial myopia. Table 3.2, Panel A presents the results of Equation 3.1. Overall, I find increases in ownership by boutique institutional investors (*BoutiqueBuy*) is positively associated with three measures of investment—R&D, R&D and advertising expense, and aggregate investment—providing support of Hypothesis 1. Important to my design, I include indicators for net purchases by dedicated institutional investors in all managerial myopia tests. As seen in Table 3.2, the positive association between boutique ownership and change in investment is robust to the inclusion of dedicated ownership. In particular, the insignificant coefficient on *DedicatedBuy* is consistent with prior literature (Bushee, 1998).⁴

I next substitute the dichotomous measures of boutique and dedicated ownership and purchases with continuous measures (Equation 3.2), and the results are consistent (Table 3.2, Panel B). The change in boutique ownership from t-1 to t is positively associated with R&D, R&D and advertising, and PPE. On a one-tailed test, the change in boutique ownership is also positively associated with the aggregate measure of investment. Overall, both specifications provide support in favor of Hypothesis 1.

The control variables load consistently with the notion that investment opportunity, ability, and history are relevant in predicting investment. Firms with greater resources invest more relative to other firms in their industry. Cash and profitability (ROA) increase investment, while leverage

⁴While the finding that net purchases by dedicated institutions have no curbing effect on managerial myopia is consistent with the literature (Bushee, 1998), it is possible that the lack of results could be a result of the propensity score matched design. In particular, the results documented in Table 3.2 use a propensity score matched sample on whether boutique institutional investors are net purchasers. It is unclear whether a sample matched on net purchases by dedicated institutions will yield different findings. To address this concern, I replicate Table 3.2 but use *DedicatedBuy* as the matching variable instead of *BoutiqueBuy*. In untabulated results, the coefficient on *DedicatedBuy* is insignificant across all specifications and dependent variables. Not surprisingly, the coefficient on *BoutiqueBuy* is insignificant when the sample is matched on net purchases by dedicated institutions.

Table 3.1: Covariate Balance

	<i>BoutiqueBuy</i> =1		<i>BoutiqueBuy</i> =0		Difference
	N	μ_1	N	μ_2	$\mu_1 - \mu_2$
<i>Panel A: Full Sample</i>					
Institutional Ownership in t-1	13,192	0.614	22,646	0.515	0.100***
Returns, t-1	13,192	0.034	22,646	0.040	-0.006
Market to Book in t-1	13,192	3.201	22,646	2.770	0.431***
Cash in t-1	13,192	0.148	22,646	0.147	0.001
Retained Earnings in t-1	13,192	-0.156	22,646	-0.216	0.060***
Return on Assets in t-1	13,192	0.100	22,646	0.081	0.019***
Cash Flow from Operations in t-1	13,192	0.075	22,646	0.063	0.012***
Tobin's Q in t-1	13,192	2.152	22,646	1.926	0.225***
Risk, t-1	13,192	2.465	22,646	2.796	-0.331***
Research & Development in t-1	13,192	0.045	22,646	0.044	0.001
Advertising Expenses in t-1	13,192	0.012	22,646	0.011	0.001**
Gross PPE in t-1	13,192	0.477	22,646	0.486	-0.009**
Capital Expenditure in t-1	13,192	0.052	22,646	0.047	0.005***
<i>Panel B: Propensity Score Matched Sample</i>					
Institutional Ownership in t-1	5,685	0.675	5,685	0.685	-0.010**
Returns, t-1	5,685	0.049	5,685	0.036	0.013*
Market to Book in t-1	5,685	2.731	5,685	2.704	0.027
Cash in t-1	5,685	0.136	5,685	0.132	0.005*
Retained Earnings in t-1	5,685	-0.108	5,685	-0.116	0.008
Return on Assets in t-1	5,685	0.106	5,685	0.105	0.000
Cash Flow from Operations in t-1	5,685	0.081	5,685	0.081	0.000
Tobin's Q in t-1	5,685	1.928	5,685	1.903	0.025
Risk, t-1	5,685	2.319	5,685	2.338	-0.019
Research & Development in t-1	5,685	0.044	5,685	0.042	0.002
Advertising Expenses in t-1	5,685	0.011	5,685	0.011	0.000
Gross PPE in t-1	5,685	0.474	5,685	0.494	-0.020***
Capital Expenditure in t-1	5,685	0.046	5,685	0.048	-0.001

This table presents the covariate balance in the sample before and after matching on *BoutiqueBuy*. Reported results are based on a match within the same Fama French 48 industry and year, a caliper of 0.01, and no replacement. The stars on the mean difference correspond to the p-value of an paired two-sample t-test between *BoutiqueBuy*=1 and *BoutiqueBuy*=0. The symbols *, **, and *** correspond to a p-value less than 0.1, 0.05, and 0.01, respectively.

Table 3.2: Firm Investment and Net Purchases by Boutique Institutions

<i>Panel A: Dichotomous Measures of Boutique Ownership</i>					
	R&D	RDAE	Capex	PPE	Aggregate
Boutique Firm	−0.000 (−0.128)	−0.001 (−0.610)	−0.001 (−1.156)	−0.006** (−2.572)	−0.000 (−0.168)
Boutique Buy	0.003** (2.280)	0.002* (1.947)	0.000 (0.738)	0.002 (1.458)	0.002** (1.961)
Dedicated Firm	−0.007*** (−3.256)	−0.005*** (−3.123)	0.001 (1.307)	−0.011*** (−3.617)	−0.002 (−0.917)
Dedicated Buy	−0.000 (−0.018)	0.000 (0.560)	0.000 (0.352)	−0.004*** (−2.753)	−0.000 (−0.042)
Dependent Variable in t-1	0.917*** (51.163)	0.928*** (65.967)	0.592*** (33.748)	0.957*** (169.057)	0.784*** (57.027)
Institutional Ownership in t-1	0.001 (0.450)	0.001 (0.595)	0.001 (1.107)	0.004 (1.069)	0.004** (2.030)
Returns, t-1	0.002 (1.128)	0.001 (0.513)	−0.001 (−1.294)	0.005** (2.039)	0.000 (0.137)
Market to Book in t-1	0.000 (1.549)	0.000 (0.950)	−0.000 (−0.253)	−0.000 (−0.390)	0.000 (0.233)
Cash in t-1	0.040*** (5.301)	0.032*** (4.838)	0.009*** (3.112)	0.031*** (4.019)	0.045*** (6.676)
Retained Earnings in t-1	−0.001 (−0.828)	0.000 (0.531)	−0.001** (−2.228)	0.007*** (4.246)	−0.001 (−1.064)
Leverage in t-1	−0.019*** (−4.023)	−0.009*** (−2.601)	−0.001 (−0.654)	0.000 (0.087)	−0.008** (−2.106)
Return on Assets in t-1	−0.013 (−0.953)	0.002 (0.164)	0.022*** (3.871)	−0.017 (−1.116)	0.001 (0.090)
Cash Flow from Operations in t-1	0.035** (2.368)	0.020 (1.528)	0.008 (1.500)	0.007 (0.410)	0.011 (0.761)
Tobin's Q in t-1	−0.002* (−1.918)	−0.002*** (−2.589)	0.001*** (3.226)	−0.006*** (−3.204)	0.001 (1.086)
Log(Firm Age)	0.000 (0.060)	0.000 (0.110)	−0.000 (−0.686)	−0.005*** (−4.130)	−0.002** (−2.397)
Firm Size in t-1	0.003*** (5.454)	0.002*** (5.141)	0.000 (0.153)	0.005*** (7.873)	0.001** (2.029)
Risk, t-1	0.005*** (5.368)	0.004*** (6.007)	0.001** (2.166)	0.010*** (7.435)	0.004*** (5.128)
Asset Growth in t-1	0.010*** (3.143)	0.010*** (3.298)	0.004*** (2.820)	0.011** (2.562)	0.007** (2.330)
Std(ROA) in t-1	−0.086 (−1.363)	−0.045 (−0.843)	−0.058** (−2.245)	−0.101 (−1.493)	−0.005 (−0.089)
Std(CapEx) in t-1	−0.179*** (−3.658)	−0.109*** (−2.944)	0.374*** (9.917)	0.436*** (5.981)	0.045 (0.953)
Year & Industry Fixed Effects	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Observations	11, 370	11, 370	11, 370	11, 362	11, 370

Table 3.2: Continued

<i>Panel B: Continuous Measures of Boutique Ownership</i>					
	R&D	RDAE	Capex	PPE	Aggregate
Boutique Ownership (%) in t	−0.000 (−0.012)	0.013 (0.604)	−0.003 (−0.329)	−0.025 (−0.866)	0.007 (0.334)
Δ Boutique Ownership (%) from t-1 to t	0.130** (2.425)	0.072* (1.840)	−0.001 (−0.036)	0.131** (2.097)	0.057 (1.397)
Dedicated Ownership (%) in t	0.010 (0.841)	0.007 (0.723)	−0.000 (−0.065)	−0.009 (−0.648)	0.007 (0.769)
Δ Dedicated Ownership (%) from t-1 to t	0.016 (0.892)	0.011 (0.657)	−0.006 (−0.610)	−0.016 (−0.487)	−0.008 (−0.457)
Dependent Variable in t-1	0.916*** (50.741)	0.927*** (65.596)	0.592*** (33.814)	0.957*** (167.740)	0.783*** (57.017)
Institutional Ownership in t-1	−0.002 (−0.546)	−0.001 (−0.473)	0.002 (1.310)	0.000 (0.083)	0.003 (1.447)
Returns, t-1	0.002 (1.123)	0.001 (0.525)	−0.001 (−1.305)	0.005** (2.039)	0.000 (0.135)
Market to Book in t-1	0.000 (1.586)	0.000 (0.937)	−0.000 (−0.269)	−0.000 (−0.398)	0.000 (0.214)
Cash in t-1	0.040*** (5.217)	0.031*** (4.743)	0.009*** (3.183)	0.028*** (3.667)	0.045*** (6.689)
Retained Earnings in t-1	−0.001 (−0.845)	0.000 (0.541)	−0.001** (−2.192)	0.007*** (4.187)	−0.001 (−1.039)
Leverage in t-1	−0.019*** (−4.034)	−0.009*** (−2.638)	−0.001 (−0.666)	0.001 (0.154)	−0.008** (−2.146)
Return on Assets in t-1	−0.014 (−1.001)	0.001 (0.108)	0.023*** (3.903)	−0.018 (−1.203)	0.001 (0.082)
Cash Flow from Operations in t-1	0.035** (2.386)	0.020 (1.554)	0.008 (1.480)	0.008 (0.451)	0.011 (0.760)
Tobin's Q in t-1	−0.002* (−1.956)	−0.002*** (−2.656)	0.001*** (3.254)	−0.006*** (−3.475)	0.001 (1.134)
Log(Firm Age)	0.000 (0.181)	0.000 (0.305)	−0.000 (−0.720)	−0.005*** (−3.840)	−0.002** (−2.327)
Firm Size in t-1	0.003*** (5.541)	0.002*** (5.092)	0.000 (0.192)	0.004*** (6.769)	0.001** (2.258)
Risk, t-1	0.005*** (5.385)	0.004*** (6.004)	0.001** (2.122)	0.010*** (7.473)	0.004*** (5.142)
Asset Growth in t-1	0.010*** (3.059)	0.009*** (3.251)	0.005*** (2.886)	0.010** (2.437)	0.007** (2.335)
Std(ROA) in t-1	−0.083 (−1.320)	−0.042 (−0.794)	−0.059** (−2.265)	−0.103 (−1.507)	−0.003 (−0.052)
Std(CapEx) in t-1	−0.177*** (−3.628)	−0.110*** (−2.994)	0.374*** (9.903)	0.434*** (5.942)	0.045 (0.960)
Year & Industry Fixed Effects	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Observations	11,370	11,370	11,370	11,362	11,370

Panel A (Panel B) reports the means (medians) and standard deviations of all types of institutional owners: boutiques, dedicated, transient, quasi-index, and activist. All variables are defined in Appendix A. Dedicated, transient, and quasi-index classifications are made available by Brian Bushee. Activists are those institutions that have initiated a shareholder proposal. The classification of boutique is defined in detail in Section 2.3. The stars on the mean values for dedicated, transient, quasi-index, and activist correspond to the p-value of an unpaired two-sample t-test between boutiques and the respective type. The stars on the median values for dedicated, transient, quasi-index, and activist correspond to the p-value of a non-parametric equality-of-medians test between boutiques and the respective type. The sample period is 2003 to 2015. Continuous variables are winsorized at 1 and 99. The symbols *, **, and *** correspond to a p-value less than 0.1, 0.05, and 0.01, respectively.

restricts investment. Larger firms and firms with more volatility in their stock price have greater opportunity to invest and are positively associated with investment. The positive coefficient on asset growth suggests that firms that have shown growth in the past are more likely to invest in the future. Lastly, the prior years' investment is strongly predictive of future investment.

Overall, the results provide evidence consistent with Hypothesis 1, that boutique institutional investors curb managerial myopia. Increases in ownership by boutique institutional investors is positively associated with larger levels of R&D, R&D and advertising expense, PP&E, and aggregate investment within a propensity score matched sample.

3.3.1 Robustness Tests

While the empirical evidence is consistent with Hypothesis 1, this setting suffers from endogeneity concerns. An alternative explanation for the findings is that the firms boutiques are choosing to invest in fundamentally differ from the firms that boutiques are not choosing to invest in. To lend credence to the conclusion that boutiques can influence management and curb myopia, I execute two alternative designs and a placebo test.

In untabulated analyses, I conduct a placebo test for my primary test of Hypothesis 1. In particular, in both Equations 3.1 and 3.2 I replace the dependent variables of $y_{i,t}$ with $y_{i,t-2}$. Boutique purchases in year $t-1$ to t should have no effect on investments in the prior year ($t-2$) if the relation is causal. Indeed, I fail to reject the null in all models.

Next, I consider a difference-in-difference design where non-zero boutique ownership is the treatment. The model is as follows:

$$y_{i,t} = \beta_1 TreatmentYear_{i,t} + \beta_2 TreatmentFirm_i + \beta_3 y_{i,t-1} + X'_{i,t-1} \Lambda + \alpha_t + \gamma_{ff48} + \epsilon_{i,t} \quad (3.3)$$

$TreatmentYear$ is an indicator variable equal to one if firm i has non-zero boutique ownership in year t , and zero otherwise. $TreatmentFirm$ is an indicator variable equal to one if firm i has non-zero boutique ownership at any point in the time series. $TreatmentFirm$ captures differences

between those firms in which boutiques do and do not decide to invest, and the year fixed effects (α_t) capture differences across years, thus the coefficient on *TreatmentYear* can be interpreted as the effect of boutique ownership on discretionary investment. An alternate specification replaces *TreatmentFirm* with firm fixed effects (γ_i), as follows:

$$y_{i,t} = \beta_1 \text{TreatmentYear}_{i,t} + \beta_2 y_{i,t-1} + X'_{i,t-1} \Lambda + \alpha_t + \gamma_i + \epsilon_{i,t} \quad (3.4)$$

The advantage of this model is that the firm fixed effects capture differences in investment behavior for each firm. The limitation of this model is reduced power, because the model only captures within-firm variation, of which, I only observe an average of 6 years per firm.

The results from these difference-in-difference designs (Equations 3.3 and 3.4) are tabulated in Table 3.3 (Panels A and B, respectively). In Panel A, the coefficient on *TreatmentYear* is positive and significant for three out of five discretionary investment measures. In Panel B, where power is reduced, the coefficient on *TreatmentYear* is positive and significant for two out of five discretionary investment measures. I find this evidence consistent with a causal interpretation of the results.

Lastly, I investigate whether a change in boutique ownership influences a *change* in discretionary investment. If the positive association between boutique purchases and discretionary investment is due to selection and not monitoring influence, then I would not expect a change in monitoring outcomes to follow a change in boutique ownership. Using both dichotomous and continuous measures of changes in boutique ownership, I estimate the following models using ordinary least squares:

$$\Delta y_{i,t+1} = \beta_1 \text{BoutiqueBuy}_{i,t} + \beta_2 \text{DedicatedBuy}_i + \Delta X'_{i,t-1} \Lambda + \epsilon_{i,t} \quad (3.5)$$

$$\Delta y_{i,t+1} = \beta_1 \Delta \text{BoutiqueOwnership}_{i,t} + \beta_2 \Delta \text{DedicatedOwnership}_i + \Delta X'_{i,t-1} \Lambda + \epsilon_{i,t} \quad (3.6)$$

The results of Equations 3.5 and 3.6 are reported in Panels A and B of Table 3.4, respectively. In

Table 3.3: Robustness Test Using Difference in Difference Design

<i>Panel A: Difference in Difference Design</i>					
	R&D	RDAE	Capex	PPE	Aggregate
Treatment Year	0.001* (1.841)	0.001** (2.187)	−0.000 (−0.281)	0.005*** (3.098)	0.001 (1.055)
Treatment Firm	0.000 (0.004)	0.000 (0.148)	−0.000 (−0.476)	−0.004*** (−2.950)	0.000 (0.644)
Dependent Variable in t-1	0.844*** (242.589)	0.866*** (266.649)	0.591*** (106.709)	0.964*** (430.810)	0.775*** (186.746)
Controls	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Year Fixed Effects	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Industry Fixed Effects	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Firm Fixed Effects	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Observations	27, 122	27, 122	27, 122	23, 864	27, 122
<i>Panel B: Fixed Effects Difference in Difference Design</i>					
	R&D	RDAE	Capex	PPE	Aggregate
Treatment Year	0.000 (0.295)	0.000 (0.431)	0.001** (2.061)	0.003* (1.718)	0.001 (1.471)
Dependent Variable in t-1	0.386*** (60.436)	0.418*** (65.945)	0.293*** (46.492)	0.670*** (112.441)	0.339*** (53.315)
Controls	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Year Fixed Effects	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Industry Fixed Effects	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Firm Fixed Effects	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Observations	27, 228	27, 228	27, 228	23, 910	27, 228

This table presents the results of estimating firm investment using a difference-in-difference design. Panels A and B correspond to Equations 3.3 and 3.4. Equations are estimated using ordinary least squares. All variables are defined in Appendix A. The sample period is 2003 to 2015. Continuous variables are winsorized at 1 and 99. *t*-statistics are in parentheses, and the symbols *, **, and *** correspond to a *p*-value less than 0.1, 0.05, and 0.01, respectively.

Table 3.4: Robustness Test Using Changes Design

<i>Panel A: Dichotomous Measures of Boutique Purchases</i>					
	Δ R&D	Δ RDAE	Δ Capex	Δ PPE	Δ Aggregate
Boutique Buy	0.000* (1.688)	0.001** (2.533)	0.000 (0.787)	0.005*** (4.152)	0.001** (1.989)
Dedicated Buy	0.000* (1.722)	0.001* (1.864)	0.001 (1.582)	0.004*** (3.342)	0.001** (2.197)
Change in Institutional Ownership, t-1	0.006*** (2.935)	0.008*** (3.640)	0.011*** (4.438)	0.040*** (5.151)	0.021*** (5.569)
Δ Controls	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Fixed Effects	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Observations	30,746	30,746	30,746	26,795	30,746
<i>Panel B: Continuous Measures of Boutique Ownership</i>					
	Δ R&D	Δ RDAE	Δ Capex	Δ PPE	Δ Aggregate
Δ Boutique Ownership, t-1 to t	0.010 (0.804)	0.024* (1.762)	0.004 (0.270)	0.030 (0.821)	0.036 (1.506)
Δ Dedicated Ownership, t-1 to t	0.006 (1.132)	0.010* (1.673)	0.011 (1.421)	0.017 (0.848)	0.024** (2.148)
Δ Controls	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Fixed Effects	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Observations	30,746	30,746	30,746	26,795	30,746

This table reports the results from estimating Equations 3.5 and 3.6 using ordinary least squares. All variables are defined in Appendix A. The sample period is 2003 to 2015. Continuous variables are winsorized at 1 and 99. All regressions are clustered by firm. *t*-statistics are in parentheses, and the symbols *, **, and *** correspond to a *p*-value less than 0.1, 0.05, and 0.01, respectively.

Panel A, *BoutiqueBuy* is positively associated with four out of five change in discretionary investment, suggesting that in the year following a purchase by boutique institutions, managerial myopia is reduced and discretionary investment increases. In Panel B, the coefficients on Δ *Boutique Ownership* are consistently positive, but only significant for Δ *RDAE*. Interestingly, this design also suggests some monitoring benefit of dedicated institutions as well. In light of the placebo test, the difference-in-difference designs, and the changes analysis, the evidence is consistent with the conclusion that boutiques are curbing myopia in management.

Lastly, another alternative explanation to the effect I document is that I am picking up on a “concentration effect” and not a “boutique effect.” In a study of which institutions monitor

management, Fich et al. (2015) focus on the *weight* of a given firm in that institutions' portfolio. They posit that an institution will be more motivated to monitor a firm when that firm represents a larger portion (10%) of its portfolio. In the setting of acquisitions, they find target firms with these institutions as shareholders have greater bid completion rates, higher premiums, and lower acquirer returns. Thus, the authors conclude that institutions are more incentivized to monitor a firm when their assets are concentrated in that firm.

To disentangle whether the result I find is driven only by boutiques' concentration of assets, I replicate the analyses in Table 3.2 and include variables *Concentrated Firm* and *Concentrated Buy*. These two variables are constructed similarly to *Boutique Firm* and *Boutique Buy* for non-boutique institutions in the top tercile of internal concentration. In other words, *Concentrated Firm* and *Concentrated Buy* should capture the influence of institutions that have a highly concentrated investment strategy, but do not meet the other criteria of a boutique institutional investor. In all tests, the coefficients on *Boutique Firm* and *Boutique Buy* remain consistent, but the coefficients *Concentrated Firm* and *Concentrated Buy* are insignificant or significant in the opposite direction.

3.4 Mechanism of Influence

Thus far the evidence documented in this paper is consistent with the conclusion that boutiques do monitor management. This finding reflects the prediction that boutiques are incentivized to monitor management due to their concentrated holdings. However, it is still not apparent why management would respond to boutiques' demands due to their small size and small holdings. Understanding why management might heed the institutional voice of boutiques is important because it lends credence to a causal interpretation of the results: that boutiques are effective monitors of management.

A potential source of boutiques' influence is their specialization. Boutiques are unique among institutional investors in that they select fewer investments and often concentrate these investments by industry. If other institutional investors consider boutiques as experts, then boutiques' decision

to buy or sell a stock may have a ripple effect in the market. Thus, boutiques may have influence beyond their direct holdings as a result of their expertise.

To test this prediction, I examine whether non-boutiques' buy and sell decisions are influenced in part by boutiques' buy and sell decisions. If abnormal non-boutique trading following boutiques' change in ownership, then it would suggest that non-boutiques are observing and responding to boutiques' trading decisions. This behavior would suggest that non-boutiques consider boutiques to have expertise. Using quarterly observations, I estimate the following model using ordinary least squares:

$$\Delta AdjNonBoutiqueOwnership(\%)_{i,t+1} = \beta_1 \Delta BoutiqueOwnership(\%)_{i,t} + X'_{i,t} \Lambda + \epsilon_{i,t} \quad (3.7)$$

The dependent variable is the change in non-boutique ownership in quarter $t+1$ adjusted by the average change in non-boutique ownership in quarters $t-3$ to t . I use an adjusted measure in order to account for recent trends in the non-boutiques' buying or selling patterns. The independent variable of interest is the change in boutique ownership in quarter t . I control for determinants of institutional ownership as documented in prior literature ($X_{i,t}$) including firm characteristics, firm performance, and stock characteristics (Chung and Zhang, 2011). Table 3.5, Column (1) presents the results. An increase (decrease) in boutique ownership in quarter t is associated with an above-average increase (decrease) in non-boutique ownership in quarter $t+1$.

I next examine whether it is boutique purchases or sales that non-boutiques are following, because a boutique's divestment may be more informative than an increased investment in the firm. In column (2) I replace $\Delta BoutiqueOwnership(\%)$ with *Boutique Buy* and *Boutique Sell*. *Boutique Buy* (*Sell*) is an indicator variable equal to one if boutiques purchased (sold) stock in firm i in quarter t . In column (3), I add indicator variables for meaningful boutique purchases and sales when boutiques purchase or sell more than one percent of common stock outstanding in the quarter. The coefficients on *Boutique Sell* and *Meaningful Boutique Sell* are negative and significant. This suggests that non-boutiques are selling after boutiques sell, and this effect is

Table 3.5: Are Boutiques Leaders Among Institutions

	All Boutiques			Industry Expert Boutiques		
	(1)	(2)	(3)	(4)	(5)	(6)
Δ Boutique Ownership (%)	0.193** (2.093)			1.180*** (2.864)		
Boutique Buy		0.001 (0.441)	0.001 (0.519)		0.004*** (2.940)	0.004*** (3.021)
Meaningful Boutique Buy			-0.001 (-0.445)			0.002 (0.500)
Boutique Sell		-0.003*** (-3.440)	-0.002** (-2.420)		-0.004*** (-3.107)	-0.003*** (-2.742)
Meaningful Boutique Sell			-0.004** (-2.104)			-0.007 (-1.118)
MVE	-0.001*** (-3.832)	-0.001*** (-3.407)	-0.001*** (-3.624)	-0.001*** (-3.817)	-0.001*** (-3.704)	-0.001*** (-3.701)
Tobin's Q	-0.000 (-0.257)	-0.000 (-0.244)	-0.000 (-0.253)	-0.000 (-0.224)	-0.000 (-0.231)	-0.000 (-0.223)
Leverage	0.004* (1.646)	0.004* (1.659)	0.005* (1.694)	0.004 (1.632)	0.004 (1.626)	0.004 (1.636)
YTD ROA	-0.010*** (-2.627)	-0.010*** (-2.664)	-0.010*** (-2.660)	-0.010*** (-2.650)	-0.010*** (-2.619)	-0.010*** (-2.632)
YTD Free Cash Flow	-0.000 (-0.044)	-0.000 (-0.025)	-0.000 (-0.037)	-0.000 (-0.040)	-0.000 (-0.045)	-0.000 (-0.044)
Risk	-0.002** (-2.571)	-0.002** (-2.535)	-0.002** (-2.551)	-0.002** (-2.568)	-0.002** (-2.568)	-0.002*** (-2.579)
BHAR	0.029*** (3.724)	0.029*** (3.681)	0.029*** (3.698)	0.029*** (3.745)	0.029*** (3.737)	0.029*** (3.744)
Price	0.000* (1.767)	0.000* (1.774)	0.000* (1.706)	0.000* (1.773)	0.000* (1.780)	0.000* (1.765)
Bid Ask Spread	0.090 (1.256)	0.092 (1.261)	0.091 (1.250)	0.089 (1.243)	0.089 (1.248)	0.089 (1.248)
Turnover	0.000 (1.401)	0.000 (1.383)	0.000 (1.530)	0.000 (1.400)	0.000 (1.370)	0.000 (1.390)
Log(Firm Age)	0.005** (2.400)	0.005** (2.429)	0.005** (2.394)	0.005** (2.417)	0.005** (2.421)	0.005** (2.418)
Quarter Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	173,075	173,075	173,075	173,075	173,075	173,075
R-Squared	0.093	0.093	0.093	0.093	0.093	0.093

This table reports the results from estimating Equation 3.7 using ordinary least squares. The dependent variable in all models is the change in non-boutique ownership in quarter $t+1$ adjusted by the average change in non-boutique ownership in quarters $t-3$ to t . All independent variables are measured in quarter t . In columns (1) through (3) all boutiques are included in the calculation of the boutique variables. In columns (4) through (6) only industry expert boutiques are included in the calculation of boutique variables. Boutiques are an industry expert when their primary industry of investment is the same as the industry of the firm. All variables are defined in Appendix A. Observations are by quarter and firm. The sample period is 2003 to 2015. Continuous variables are winsorized at 1 and 99. All regressions are clustered by firm. The symbols *, **, and *** correspond to a p-value less than 0.1, 0.05, and 0.01, respectively.

stronger when the boutiques' sale is large.

I expect this result to be strongest when the boutique is also an industry expert. Columns (4) through (6) parallel columns (1) through (3) but substitute the boutique variables with industry expert boutique variables. A boutique is considered an industry expert when their primary industry of investment is the same as the industry of the firm.⁵ The coefficient on $\Delta \text{BoutiqueOwnership}(\%)$ for industry experts (1.180) is significantly larger than the coefficient for all boutiques (0.193, Chi-square statistic of 7.11), suggesting that a higher level of expertise has greater influence on non-boutique institutions. In columns (5) and (6), the coefficients on *Boutique Buy (Boutique Sell)* are significant and positive (negative), the coefficients on *Meaningful Boutique Buy (Sell)* are insignificant. When it comes to industry expert boutiques, it does not require a meaningful purchase or sale to influence non-boutique institutions' investment decisions.

Overall, the evidence suggests that non-boutiques are observing and following the investing decisions of boutique institutional investors. This response is strongest when boutiques also have a industry expertise. This empirical evidence suggests that other institutional investors notice boutiques' expertise and boutiques' investment decisions have influence beyond their holdings. Thus, boutiques' expertise is one channel through which boutiques garner influence to effectively monitor management.

⁵A boutique's primary industry is defined as the Fama French 48 industry in which the boutique has the largest proportion of assets invested. For example, a boutique has 45% of its assets invested in industry 10, 30% in industry 15, and 25% in industry 40. That boutique's primary industry is Fama French industry 10. That boutique will only be included as an expert for firms in industry 10.

4. VALUE IMPLICATIONS OF BOUTIQUE OWNERSHIP

4.1 Hypothesis Development

A broader implication of boutique ownership is whether boutique-owned firms have above-average returns. There are several channels through which boutiques may earn abnormal returns. In particular, improved monitoring has the potential to increase firm value (Black, 1992). Additionally, an information advantage, enjoyed by some institutional investors, can translate to future returns (Yan and Zhang, 2009). Boutiques' expertise would play an important role in both of these possible channels.

First, corporate governance oversight by boutique institutions may contribute to above-average returns. Optimal corporate governance mechanisms vary with the needs of the firm. For example, Coles et al. (2008) demonstrate that the optimal board structure can vary in the cross section and conclude that a 'one size fits all' approach to corporate governance is potentially value-destroying. Thus, a uniformly applied corporate governance practice may not maximize value for every firm. However, boutiques are uniquely poised, due to their expertise, to influence corporate governance in a tailored, firm-specific approach. Thus, boutiques' influence is likely to be value enhancing, resulting in above-average market returns.

Second, sophisticated investors - such as institutional investors - use information advantages to earn abnormal returns (e.g., Bennett et al., 2003; Yan and Zhang, 2009). The information advantage traded on by institutional investors can originate from two sources: public information not yet reflected in stock price or private information. For example, consistent with the notion that institutional investors have a firm-level information advantage, Piotroski and Roulstone (2004) find that institutional trading facilitates the assimilation of firm-level information into stock price. Additionally, Maffett (2012) documents evidence consistent with institutional investors trading on private information by studying the relation between institutional trades and future returns within

a cross-section of information environment opacity.

However, it is not obvious that boutiques will earn abnormal returns. First, corporate governance changes may not necessarily earn abnormal returns. For example, Bhagat and Bolton (2008) find that governance measures, while correlated with operating performance, are not correlated with stock market performance. Thus, boutiques' influence on the corporate governance framework may not have any stock market performance implication. Second, it is institutions' economies of scale that make costly information acquisition affordable. While boutiques' small size affords them expertise, it may also constrain their ability to acquire information.

Thus, I state my second hypothesis in the alternative:

Hypothesis 2. *Boutique institutional investors earn abnormal returns.*

Lastly, I investigate the prediction that boutique institutions have an information advantage. As previously stated, boutiques' expertise could enable boutiques to use public information that is not yet reflected in price and to generate private information.

Consistent with the claim that public information is impounded gradually into stock price, Choi and Sias (2012) find that financial strength (as measured by the Piotroski (2000) F-Score) predicts future returns. Additionally, Choi and Sias (2012) find that the information in a firm's fundamentals is incorporated through trades made by institutional investors. Thus, they conclude that these sophisticated investors are superior at recognizing undervaluation of firms with strong financial condition. Choi and Sias (2012) also find that transient institutions are first to act in incorporating financial information into stock price, suggesting that transient institutions are more sophisticated than non-transient institutions.

Boutiques' expertise may enable a more sophisticated use of publicly available information. In particular, their expertise may be able to help them identify inconsistencies between financial strength and valuation. If boutiques are sophisticated users of financial information, I expect boutiques to trade on information in firm fundamentals. I state this hypothesis in the alternative:

Hypothesis 3a. *Boutique institutional investors trade on information in firm fundamentals.*

There are several reasons to expect boutiques to trade on information incremental to fundamentals. Boutiques may use information generated by their expertise, such as a superior understanding of industry trends or superior forecasting of future demand and profitability. Also, boutiques' limited number of investments potentially enables greater investment in expertise via the acquisition of private information. Firm-specific, private information can be costly. For an institution with hundreds of investments, obtaining this costly, firm-specific, private information may not produce sufficient returns to be worthwhile. However, boutique institutions have a small number of investments, therefore such costly information may be worthwhile to obtain.

If boutiques trade on information incremental to what is publicly available, then I expect boutiques to earn larger abnormal returns holding fundamentals constant. I state this hypothesis in the alternative:

Hypothesis 3b. *Boutique institutional investors earn higher abnormal returns, holding constant firm fundamentals.*

4.2 Research Design

To test the value implication of boutique ownership, I estimate the Fama and French (2015) five-factor asset pricing model for institutional investor portfolios as follows:

$$R_{i,t} - R_{F,t} = \alpha + \beta_1(R_{M,t} - R_{F,t}) + \beta_2SMB_t + \beta_3HML_t + \beta_4RMW_t + \beta_5CMA_t + \epsilon_{i,t} \quad (4.1)$$

The five-factor model captures the relation between portfolio returns and factor-mimicking returns, designed to capture common predictors of returns. $R_{i,t}$ is a security or portfolio return in

time t . $R_{M,t}$ is the market rate and $R_{F,t}$ is the risk free rate (U.S. Treasury Bill rate). β_1 indicates the sensitivity of the security or portfolio to changes in the market. In addition to market returns, the four other factors that predict security returns are size, value, profitability and asset growth.¹ These factors are computed as the return to a diversified and hedged portfolio. For example, SMB_t is the return of a diversified portfolio of small stocks less the return of a diversified portfolio of large stocks (Fama and French, 2015). Similarly, HML_t is high minus low book-to-market stocks, RMW_t is stocks of robust minus weak profitability, and CMA_t is low minus high asset growth.²

The parameter of interest is α : the portion of returns not explained by one of the five factors. In other words, α can be thought of as the impact of the institutional investor. A more positive α implies superiority at selecting value-increasing firms.

I regress monthly returns R_t on the five-factors (Equation 4.1) for each institutional investor, i . Since I only have the institution's composition of investments at four points in the year—the end of each calendar quarter, per 13F filing requirements—I assume the holdings reported at the end of a given quarter are held through the end of the following quarter. I require four years of monthly data in order to run a time-series regression for a given institution. From each institutions' time-series regression, I capture the unique set of parameters. I then calculated the Fama and MacBeth (1973) test statistic to test if the α of boutique institutional investors is positive. Following from Hypothesis 2, I predict:

$$\bar{\alpha}_{boutique} > 0 \quad (4.2)$$

I next examine the use of firm fundamentals by boutiques and whether boutiques are able to identify undervalued firms *holding constant* the firm's fundamentals. It is known that firm fundamentals can predict future returns (Piotroski, 2000). And it is also known that holding constant firm

¹I use the language "asset growth" to distinguish nominal asset growth as used in Fama and French (2015) from "investment" as used in this paper to describe research and development, capital expenditure, and other investments in projects and fixed assets.

²All factors are obtained from Kenneth French's website.

fundamentals, considerable variation in future returns remains (Piotroski and So, 2012). Therefore, if boutiques are sophisticated users of financial statements then I expect the fundamentals of boutique-owned firms to be stronger than those of non-boutique-owned firms (Hypothesis 3a). In addition, if boutiques have an informational advantage then I expect boutiques to enjoy higher BHARs holding constant firm fundamentals (Hypothesis 3b).

I rely on the Piotroski (2000) F-Score. The F-Score is a integer value on a scale of 0 to 9, where for each of nine criteria met, a firm is awarded one point. A low (high) F-Score indicates weak (strong) firm fundamentals. Based on their F-Score, firms are assigned into one of three tiers: “low” includes firms with F-Scores of 0-3; “medium” includes firms with F-Scores of 4-6; and “high” includes firms with F-Scores of 7-9 (Piotroski and So, 2012). The F-Score contains four criteria to measure firm profitability: positive ROA, positive cash flows from operations, positive change in ROA, and negative accruals. The F-Score contains three criteria to measure financial health: negative change in leverage, positive change in liquidity, and no equity issuance. Lastly, the F-Score is rounded out by two criteria measuring operating efficiency: a positive change in gross margin ratio, and a positive change in the asset turnover ratio. All variables are detailed in Appendix A. My test of Hypothesis 3a is a two-tailed t-test comparing the F-Scores for firms with and without boutique ownership.

Financial statement information used in computing the F-Score is publicly available to institutional investors by the beginning of the fourth month after the fiscal year end (Piotroski, 2000; Piotroski and So, 2012). However, I only observe the institutional investors update their portfolios at the end of each calendar year quarter. Therefore, I compute annual BHAR beginning with the date of the first 13F filed 5 months after the fiscal year end.³ I classify the firm as owned by a boutique institution if ownership by boutique institutions is greater than zero for the same year in which I measure BHARs. My primary test of Hypothesis 3b is a two-tailed t-test comparing the

³For example, I assume the financial statements of a firm with a December 31 fiscal year is available for use by institutional investors in April. Therefore, I use the next 13F filing date after April as the beginning of the BHAR for the year. In this case, that filing date is June 30.

BHARs for firms owned by boutiques and firms without boutique ownership within F-Score tier.

4.3 Results

I next examine whether boutiques earn returns in excess of known risk factors (Hypothesis 2). First, I consider descriptive evidence. For each institution in my sample, I compute its portfolio's quarterly buy and hold abnormal returns (henceforth, BHARs).⁴ On average, boutiques earn 0.53% quarterly BHARs, which is significantly greater than zero (t -statistic of 7.79) and significantly greater than the BHARs earned by dedicated, transient, and quasi-index institutional investors, on average.

My sample consists of 2,704 unique institutional investors with more than five years (60 months) of data in order to execute the time-series regressions outlined in Equation 4.1. I classify an institutions based on their permanent classification.⁵ All institutions not classified as boutique are classified as non-boutique. For each unique institutional investor, I regress monthly returns on five market factors and a constant (Fama and French, 2015). I retain the coefficients from each regression and average them by institution type in Table 4.1, Panel A. Also tabulated are Fama and MacBeth (1973) test statistics for the average coefficients.⁶

The primary coefficient of interest is α , the abnormal performance of the portfolios of each type of institutional investor. Alpha (α) can be thought of as the skill of the institution to create a portfolio that generates returns incremental to those predicted by known market factors.⁷ I find evidence consistent with Hypothesis 2: boutique institutional investors earn returns in excess of returns explained by known risk factors. The mean α of boutique institutional investors is 0.145 with a Fama Macbeth t -statistic of 2.89. This results implies that boutique institutions have a superior skill at selecting portfolios that earn abnormal returns.⁸

⁴I assume that all investments reported in the 13F filing are held for the entire calendar quarter.

⁵Dedicated, transient, quasi-index and activist categories exclude all permanent boutiques. The results are unchanged if overlap institutions are included in both groups.

⁶The test statistic is computed as the coefficient mean divided by the coefficient standard error (e.g., $\bar{\alpha}/(s_{\alpha}/\sqrt{N})$).

⁷A negative α does not equate to negative BHARs. All institutions (and institution categories) have, on average, positive BHARs. The negative α indicates that the returns are not incremental to these five known market factors.

⁸I report p -values from one-tailed t -tests. However, results are robust to a two-tailed t -test.

Table 4.1: Institution-Level Asset Pricing Analysis

Panel A: Model Summary by Institutional Owner Type						
	Boutique	Non-Boutique	Dedicated	Transient	Quasi-Index	Activist
Average coefficients (Fama MacBeth t -statistics)						
$\bar{\alpha}$	0.145 (2.89)	−0.070 (−10.25)	0.126 (1.60)	0.008 (0.53)	−0.119 (−18.68)	0.083 (2.43)
$\bar{\beta}_{Mkt-rf}$	1.056 (57.94)	1.024 (350.88)	1.063 (31.93)	1.078 (187.54)	0.993 (340.10)	1.023 (71.63)
$\bar{\beta}_{SMB}$	0.327 (11.89)	0.109 (19.22)	0.383 (6.83)	0.238 (24.00)	0.030 (4.99)	0.283 (11.12)
$\bar{\beta}_{HML}$	0.038 (1.13)	0.026 (4.68)	0.142 (2.15)	−0.047 (−4.22)	0.062 (10.86)	0.065 (2.50)
$\bar{\beta}_{RMW}$	−0.099 (−2.57)	0.033 (5.83)	0.003 (0.03)	−0.068 (−6.08)	0.088 (16.42)	−0.058 (−2.01)
$\bar{\beta}_{CMA}$	−0.149 (−3.540)	−0.072 (−11.90)	−0.177 (−2.10)	−0.162 (−13.19)	−0.020 (−3.37)	−0.148 (−5.34)
Average R-Square	0.650	0.844	0.621	0.803	0.873	0.758
Number of Institutions [*]						
Time-Series Regressions	176	2528	55	871	1601	156

Panel B: Unpaired t -test on α between Institutional Owner Types					
	Number of Institutions	Mean α (s_α)	Number Positive α [Significant]	Number Negative α [Significant]	$\bar{\alpha}_{bou} > \bar{\alpha}_i$ t -statistic (p-value)
Boutique	176	0.145 (0.665)	106 [17]	70 [2]	N/A
Non-Boutique	2,528	-0.070 (0.344)	788 [103]	1,740 [623]	7.39 (0.000)
Dedicated	55	0.126 (0.582)	31 [4]	24 [1]	0.19 (0.424)
Transient	871	0.008 (0.436)	403 [70]	468 [99]	3.44 (0.000)
Quasi-Index	1,601	-0.120 (0.255)	354 [29]	1,247 [522]	10.39 (0.000)
Activist	156	0.083 (0.428)	90 [17]	66 [9]	0.99 (0.162)

This table summarizes the parameters estimated from Fama and French (2015) five-factor asset pricing model by institutional investor type. Institution types are defined in Appendix A. The dependent variable in all regressions is the institution's monthly portfolio return adjusted for the risk free rate. The monthly risk free rate, market rate, and factors are obtained from Kenneth French's website. Reported coefficients (Panel A) are averages from time-series regressions for institutions with more than 48 months of data. Fama and MacBeth (1973) test statistics for α (and each β) are computed as $\bar{\alpha}/(s_\alpha/\sqrt{N})$ (or substitute α for the respective β). Reported test statistics (Panel B, Column 5) are from an unpaired two sample t -test between α of boutique institutional investors and the α of the other corresponding institutional investor type. Significance (Panel B, Columns 3 and 4) is determined at the 0.05 level.

In addition, α for boutique institutional investors is, on average, larger than that of non-boutiques, dedicated, transient, and quasi-index institutions. To test whether these differences are significant, I employ unpaired, two-sample t-tests. The results are tabulated in Panel B. Boutiques perform similarly to dedicated institutional investors and activists (t -statistic of .19 and .99, respectively) and outperform non-boutiques, transient and quasi-index institutional investors (t -statistics of 7.38, 3.44 and 10.39, respectively). While the boutiques' approach to portfolio building differs from the approach of dedicated and activist institutions in many respects, all of these types of institutions appear to enjoy premiums from a superior selection capability.

The remaining coefficients on the asset pricing models in Panel A reveal some interesting distinctions of the boutiques' portfolios. First, boutiques have greater exposure to market risk than non-boutiques.⁹ Additionally, there is no evidence that boutique institutions are selecting firms based on a size, value, or profitability strategy. Lastly, the strong negative coefficient on CMA suggests that boutiques are selecting firms with high nominal asset growth.

Also of note, the average R-square of the boutiques' asset pricing model tests is 65.0% while the average R-square for non-boutiques is 84.4%. Therefore, the performance of the boutiques' portfolios is not as well explained by known risk factors than non-boutique institutions. It is perhaps unsurprising, then, that quasi-index institutions have the highest R-square of 87.3%, because quasi-index institutions are known for holding a diverse investment portfolio with low turnover, similar to how the risk factor portfolios are formed.

Next, I test whether boutiques trade on information in firm fundamentals (Hypothesis 3a) by comparing the F-Score of firms with and without boutique ownership. I report the results in Table 4.2. The average F-Score of firms owned by boutiques is 4.950, while the average F-Score of firms not owned by boutiques is 4.654. These means are significantly different (t -statistic of 20.430), thus, boutiques appear to use fundamentals in their selection process and select firms

⁹In untabulated results, the boutiques' average β_{Mkt-rf} is statistically greater than the average β_{Mkt-rf} of non-boutiques (t -statistic of 2.70) and quasi-index institutions (t -statistic of 5.95), using unpaired, two-sample, t-tests.

with higher-quality fundamentals. This finding supports Hypothesis 3a. Additionally, consistent with the descriptive statistics presented in Table 2.2, Boutique-owned firms have higher BHARs on average (3.4% versus 2.6%, t -statistic of 2.109).¹⁰

Having established that boutiques use firm fundamentals in their investment decisions, I investigate whether boutiques trade on information incremental to what is publicly available. If boutiques enjoy a greater BHAR holding F-Score constant, then this provides evidence consistent with the claim that boutiques have an informational advantage (Hypothesis 3b).

I examine differences in BHARs for three tiers of F-Scores: “low”, “medium”, and “high”. In both the low and medium categories, boutique-owned firms enjoy higher BHARs than non-boutique-owned firms (t -statistics 2.335 and 2.453, respectively). However, in the high F-Score tier, boutique-owned firms under-perform non-boutique-owned firms (t -statistic of -4.126). Panel B paints a similar picture to the results summarized in Panel A, but relies on the annually refreshed classification of boutique firm (see *BoutiqueQ* in Table 2.1 Panel B) instead of the permanent classification of boutique. Results are stronger (and contrary results are weaker) using the annually refreshed classification of boutique firm, consistent with the conclusion that it is the boutique strategy that enables the information advantage.

There are several possible explanations for these findings. Boutiques’ industry expertise may provide an informational advantage, thereby boutiques distinguish winners from losers within an industry. Alternatively, since boutiques only invest in a small number of firms (relative to other types of institutional investors), boutiques may commit more resources to monitoring the true value of their investments. Irrespective of the source, this analysis provides evidence that boutiques do enjoy an informational advantage that enables them to distinguish winners from losers even after taking into account the firms’ financial health.

¹⁰This average differs from the average presented in Table 2.2 for two reasons. First, Table 2.2 presents quarter BHAR, while Table 4.2 presents annual BHAR. Second, Table 2.2 presents all quarters in the sample, while Table 4.2 only presents the BHAR that begins with the first 13F filing date five months after the firm’s fiscal year end.

Table 4.2: Fundamentals and Returns

<i>Panel A: Permanent Boutique Classification of Boutique Firm</i>						
	Boutique=1		Boutique=0		Difference	
	N	μ_1	N	μ_2	$\mu_1 - \mu_2$	<i>t</i> -stat
<i>Mean F-Score and BHAR by Boutique Ownership</i>						
F-Score	27,782	4.950	23,295	4.654	0.297***	20.430
BHAR	27,443	0.034	22,843	0.026	0.008**	2.109
<i>Mean BHAR by F-Score Tier and Boutique Ownership</i>						
Low	5,179	0.029	5,701	0.006	0.022**	2.335
Medium	17,099	0.035	13,963	0.023	0.011**	2.453
High	5,165	0.037	3,179	0.072	-0.035***	-4.126
<i>Panel B: Quarterly Refreshed Classification of Boutique Firm</i>						
	BoutiqueQ=1		BoutiqueQ=0		Difference	
	N	μ_1	N	μ_2	$\mu_1 - \mu_2$	<i>t</i> -stat
<i>Mean F-Score and BHAR by Boutique Ownership</i>						
F-Score	34,618	4.921	16,459	4.593	0.327***	21.164
BHAR	34,172	0.036	16,114	0.019	0.017***	4.214
<i>Mean BHAR by F-Score Tier and Boutique Ownership</i>						
Low	6,646	0.028	4,234	-0.001	0.029***	2.938
Medium	21,304	0.035	9,758	0.017	0.018***	3.666
High	6,222	0.045	2,122	0.064	-0.019**	-1.963

This table summarizes the buy and hold abnormal returns (BHAR) of firms owned and not owned by boutique institutions and by F-Score. BHARs are computed using daily returns adjusted for a value-weighted portfolio for the year beginning with the calendar quarter that begins at least 5 months after the end of the fiscal year. *Boutique* and *BoutiqueQ* are as defined in Appendix A. The low, medium, and high F-Score tiers contain firms with F-Scores in the ranges 0-3, 4-6, and 7-9, respectively. The sample period is 2003 to 2015. BHARs are trimmed at 1 and 99. Reported *t*-statistics are from a two-tailed unpaired *t*-test. The symbols *, **, and *** correspond to a *p*-value less than 0.1, 0.05, and 0.01, respectively.

5. CONCLUSIONS

Boutiques, a previously unexplored type of institutional investor, have recently emerged as a relevant participant in the equity market. Boutiques specialize in asset management and are characterized by limited assets under management and a concentrated investment strategy. Boutiques' concentrated investment strategy facilitates the development of expertise and creates incentive to engage in corporate governance oversight. However, boutiques' small size calls into question whether they can be influential. I find evidence consistent with the claim that boutiques curb managerial oversight, suggesting that they contribute to corporate governance oversight. Additionally, boutiques appear to have a beneficial impact on firm value, forming portfolios with abnormal returns. Lastly, consistent with the conclusion that boutiques' enjoy an information advantage as a result of their expertise and specialization, I find that boutiques generally earn larger abnormal returns, holding constant the firms' fundamentals.

My contribution is threefold. First, I classify an unexplored type of institution. I demonstrate how boutiques differ than other established types of institutional investors. Secondly, this paper contributes to the corporate governance literature. I respond to the call of the OECD for a re-examination of the role institutional owners play in corporate governance by studying boutiques in this setting. While boutiques' role in corporate governance oversight is theoretically ambiguous, this paper provides empirical evidence that boutiques curb managerial myopia and positively contribute to corporate governance oversight. Lastly, I contribute to the literature by providing insights into the source of boutiques' information advantage.

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APPENDIX A

VARIABLE DEFINITIONS

Institutional investor classifications of dedicated, transient, and quasi-index are generously provided by Brian Bushee on his website. Asset pricing model factors generously provided by Kenneth French on his website. All other data are from Compustat, CRSP, or Thompson Reuters. Where applicable, Compustat variables used are in parentheses.

Institution Types

BoutiqueQ		is a dummy variable equal to 1 if 75% or more of the quarters in the last 5 years satisfy the boutique requirements and equal to zero otherwise. The boutique requirements are that the institution has less than one hundred billion in assets under management, invests only in common stock (excluding exchange traded funds), is in the top tercile of internal concentration, and is an investment company or independent investment advisor.
Boutique		is an indicator variable equal to one if <i>BoutiqueQ</i> is equal to one for all quarters in the time-series and equal to zero otherwise. Throughout the paper, these institutions are referred to as ‘boutique institutional investors.’
BoutiqueFirm		is a firm-level indicator variable equal to one if the percentage of common shares outstanding (csho) owned by boutique institutional investors is greater than zero and equal to zero otherwise.
BoutiqueBuy		is an indicator variable equal to one if the change in the percentage of common shares outstanding (csho) owned by boutique institutional investors is greater than zero and equal to zero otherwise.
BoutiqueSell		is an indicator variable equal to one if the change in the percentage of common shares outstanding (csho) owned by boutique institutional investors is less than zero and equal to zero otherwise.
Meaningful Buy	Boutique	is an indicator variable equal to one if the change in the percentage of common shares outstanding (csho) owned by boutique institutional investors is greater than 1% and equal to zero otherwise.
Meaningful Sell	Boutique	is an indicator variable equal to one if the change in the percentage of common shares outstanding (csho) owned by boutique institutional investors is less than negative 1% and equal to zero otherwise.
Boutique Ownership		is a continuous variable equal to the percentage of common shares outstanding (csho) owned by boutique institutional investors.

Δ Boutique Ownership	is a continuous variable equal to the change in the percentage of common shares outstanding (csho) owned by boutique institutional investors.
Dedicated	Transient, and Quasi-Index institutions are indicators equal to one if the institution is not a boutique and Brian Bushee's <i>permclass</i> equals DED, TRA, and QIX, respectively, and equal to zero otherwise.
Activist	is an indicator equal to one if the institutional investor is not a boutique and it initiates a shareholder campaign at any time in the period 2000 to 2016 and equal to zero otherwise.
DedicatedFirm	is a firm-level indicator variable equal to one if the percentage of common shares outstanding (csho) owned by dedicated institutional investors is greater than zero and equal to zero otherwise.
DedicatedBuy	is an indicator variable equal to one if the change in the percentage of common shares outstanding (csho) owned by dedicated institutional investors is greater than zero and equal to zero otherwise.
Dedicated Ownership	is a continuous variable equal to the percentage of common shares outstanding (csho) owned by dedicated institutional investors.
Δ Dedicated Ownership	is a continuous variable equal to the change in the percentage of common shares outstanding (csho) owned by dedicated institutional investors.
Treatment Firm	is a firm indicator variable equal to one if the firm had non-zero boutique ownership in the sample period, and zero otherwise.
Treatment Year	is a firm-year indicator variable equal to one if the firm had non-zero boutique ownership in that year, and zero otherwise.

Institution Characteristics

Assets Under Management (AUM)	is a continuous variable equal to $\sum(price_i * shares_i)$, where $price_i$ is the price per share of firm i and $shares_i$ is the number of shares the institution owns of firm i .
Concentration	is a continuous variable equal to $\sum[(price_i * shares_i)^2] / AUM^2$, where $price_i$ is the price per share of firm i , $shares_i$ is the number of shares the institution owns of firm i , and AUM is the institution's assets under management.
Number of Investees	is a count variable equal to the number of distinct CUSIPs invested in by the institution.

Institutional Owner's Age	is a continuous variable equal to the 13F filing date minus the institutional investor's first 13F filing date.
Stability of Holdings	is equal to the weighted percentage of assets under management held for eight consecutive quarters.
Portfolio Turnover	is equal to the change in assets under management divided by the average of beginning and ending assets under management.
Average Holding Period (Yrs)	is equal to the mean number years each investment has been held by the institutional investor.
Average Pct. Holdings	is equal to the mean percent of common shares outstanding owned by the institution in their investments.
Percent Held in Large Blocks	is equal to the percentage of assets under management that are blockholder positions. A blockholder position is defined as ownership of 5% or more of common shares outstanding.
Herfindahl Concentration	is a continuous variable equal to $\ln(\sum[(shares_i/csho_i)^2])$ where $shares_i$ is the number of shares the institution owns of firm i and $csho_i$ is the common shares outstanding of firm i .
FF48 Industry Concentration	is a continuous variable equal to $\sum[(AUM_{ff48})^2]/AUM^2$, where AUM_{ff48} is the dollar value of assets invested in the Fama French 48 industry $ff48$ and AUM is the institution's total assets under management.
Portfolio BHAR	is a continuous variable equal to the weighted average quarterly buy and hold abnormal return of the firms held by an institutional investor for the calendar-year quarter following the 13F filing date.
Portfolio Avg Assets	is a continuous variable equal to the weighted average assets of the firms held by an institutional investor for the calendar-year quarter following the 13F filing date.
Portfolio Avg MTB	is a continuous variable equal to the weighted average market to book of the firms held by an institutional investor for the calendar-year quarter following the 13F filing date.
Portfolio Avg Growth	is a continuous variable equal to the weighted average asset growth from $t-1$ to t of the firms held by an institutional investor for the calendar-year quarter following the 13F filing date.

Portfolio Avg Firm Age is a continuous variable equal to the weighted average firm age of the firms held by an institutional investor for the calendar-year quarter following the 13F filing date.

Firm Characteristics

R&D	is a continuous variable equal to the maximum of zero or research and development (xrd) divided by total assets (at).
RDAE	is a continuous variable equal to the maximum of zero or research and development (xrd) plus advertising expenses (xad) divided by total assets (at).
Capital Expenditure (Capex)	is a continuous variable equal to the maximum of zero or capital expenditure (capx) divided by total assets (at).
Plant, Property and Equipment (PPE)	is a continuous variable equal to gross plant property and equipment (ppegt) scaled by total assets (at).
Total Investment (Aggregate)	is a continuous variable equal to the sum of research and development (xrd), advertising expense (xad), and capital expenditure (capx) divided by total assets (at).
Institutional Ownership	is a continuous variable equal to the percent of total common stock outstanding (csho) that is owned by institutional owners.
Cash	is a continuous variable equal to cash (ch) divided by total assets (at).
Retained Earnings	is a continuous variable equal to retained earnings (re) divided by total assets (at).
Return on Assets	is a continuous variable equal to earnings before depreciation (oibdp) divided by total assets (at).
Cash Flow from Operations	is a continuous variable equal to cash flow from operations (oancf).
Tobin's Q	is a continuous variable equal to total assets (at) less book value of equity (ceq) plus market value of equity (prcc_f * csho) divided by total assets (at).
Firm Size	is a continuous variable equal to the log of total assets (at).
Risk	is a continuous variable equal to the standard deviation of daily market-adjusted reutrns over year t times 100.
Leverage	is a continuous variable equal to long term debt (dltt) plus current liabilities (dlc) divided by total assets.

Firm Age	is a continuous variable equal to the log of the datadate year less the first year the firm is observed in CRSP plus one.
Growth	is a continuous variable equal to the log of the ratio of assets (at) in t to assets in $t-1$.
Std(ROA)	is a continuous variable equal to the standard deviation of quarterly ROA (oibdpq/atq) over a 3 year rolling average.
Std(Capex)	is a continuous variable equal to the standard deviation of quarterly capital expenditure scaled by assets (capxy/atq) over a 5 year rolling average.
Returns	is a continuous variable equal to the daily buy and hold abnormal returns for a year.
Market to Book	is a continuous variable equal to the market value of equity ($prcc_f * csho$) divided by the book value of equity (ceq).
Market Value of Equity (MVE)	is a continuous variable equal to the log of the price (prccq) multiplied by the common shares outstanding (cshoq).
YTD ROA	is a continuous variable equal to the year to date income (iobdpy) divided by the quarterly assets (atq).
YTD Free Cash Flow	is a continuous variable equal to year to date cash flow (oancfy) less dividends (dvpy and cdvcy) divided by quarterly assets (atq).
Price	is a continuous variable equal to the mean price over the quarter.
Bid Ask Spread	is a continuous variable equal to the mean difference between the daily ask and bid divided by the ask and bid divided by two over the quarter.
Turnover	is a continuous variable equal to the mean volume divided by shares outstanding over the quarter.

F-Score

F-Score	is a count variable equal to the sum of F_ROA, F_CFO, F_ΔROA, F_ACCRUAL, F_ΔLEVER, F_ΔLIQUID, EQ_ISSUE, F_ΔMARGIN, and F_ΔTURN.
F_ROA	is an indicator variable equal to one if return on assets is greater than zero and equal to zero otherwise. Return on assets is measured as net income (ib) divided by beginning total assets (at).

F_CFO	is an indicator variable equal to one if cash flow from operations is greater than zero and equal to zero otherwise. Cash flow from operations (oancf) is measured as operating cash flow (oancf) divided by beginning total assets (at).
F_ΔROA	is an indicator variable equal to one if ROA in year t minus ROA in year $t-1$ is greater than zero and equal to zero otherwise.
F_ACCRUAL	is an indicator variable equal to one if accrual is less than zero and equal to zero otherwise. Accrual is measured as net income (ib) less cash flow from operations (oancf) divided by average total assets (at).
F_ΔLEVER	is an indicator variable equal to one if leverage in year t minus leverage in year $t-1$ is less than zero and equal to zero otherwise. Leverage is measured as total long term debt (dltt) divided by average total assets (at).
F_ΔLIQUID	is an indicator variable equal to one if Liquidity in year t minus Liquidity in year $t-1$ is greater than zero and equal to zero otherwise. Liquidity is measured as current assets (act) divided by current liabilities (lct).
EQ_ISSUE	is an indicator variable equal to one if the firm did not issue equity in year t and equal to zero otherwise. A firm has issued equity if its common stock issued (cshi) in year t is larger than common stock issued in year $t-1$.
F_ΔMARGIN	is an indicator variable equal to one if Gross Margin in year t minus Gross Margin in year $t-1$ is greater than zero and equal to zero otherwise. Gross Margin is measured as sales (sale) minus cost of goods sold (cogs) divided by sales.
F_ΔTURN	is an indicator variable equal to one if Asset Turnover in year t minus Asset Turnover in year $t-1$ is greater than zero and equal to zero otherwise. Asset Turnover is measured as sales (sale) divided by beginning total assets (at).

APPENDIX B

QUOTES FROM BUSINESS PRESS AND INDUSTRY RESEARCH

Below is a collection of quotes from business press and industry research. All bold font is added for emphasis. All quotes in Section 2.1 are bolded for easy identification.

Exclusive focus on asset management

“more and more high-net-worth investors [are seeking] an independent firm with an **exclusive commitment** to investment and wealth management”

Jason Pride quoted in Coyle (2009)

Size

“Most **small** managers said they are just fine with moderate asset growth and **staying relatively small**.”

Comtios (2015)

“Start a **small** boutique ... for emerging wireless media and entertainment companies. ... the fund would make no more than ‘12 or 14’ investments.”

Sorkin (2006)

“Some investors warn that **small** boutiques do not have the ability to diversify like their bigger rivals. The **concentration of their portfolios** in certain asset classes or regions can also lead to big losses, if those particular assets or regions underperform.”

Oakley (2014)

Specialization

“As a boutique, if you can **specialize** in one or two things really well, you can do well... We’re not trying to be all things to all people.”

Thomas White quoted in Comtios (2015)

“In order for boutique asset managers to survive —or even thrive —in today’s environment, it is essential that they advertise to asset owners what makes them special. ‘If you have a particular **niche**, you have to target the type of client that will be attracted to that niche’.”

Janna L Sampson quoted in Comtios (2015)

“We’re building a **highly focused** and dedicated boutique”

Joseph Azelby quoted in Jacobius (2011)

“Advisors using boutiques favor the agility these more targeted firms can provide, as well as their ability to provide **specialized** or **unique** investment strategies.”

RidgeWorth Investments (2014)

“Investors can certainly benefit from the **nimble** application of ideas within boutique fund firms”

Mark Holman quoted in Comtios (2015)

“The biggest advantage is **flexibility** and customization”

Christopher Neill quoted in Comtios (2015)

*“Don’t overload on one boutique’s funds. Some fund families ... offer lineups of funds that span a variety of investment styles. Other shops, called boutiques, prefer to **specialize** in a particular style.”*

Morningstar.com (2006)

Alignment of Interests

“One long-standing charm of **narrowly focused** boutiques was their interests, in delivering superior performance, were **closely aligned with the interests** of the clients who hired them.”

Appell (2009)

“Boutique asset managers come back to provide the education about the asset class as many times as it requires until the client is comfortable enough to make an investment. The sales takes a long time, but the rewards are much greater, because the **relationship with the client is closer** and trust is higher.”

Jim Cass quoted in Williamson (2007)

“These shops also tend to excel at **aligning the interests** of portfolio managers and clients.”

Segal (2010)
